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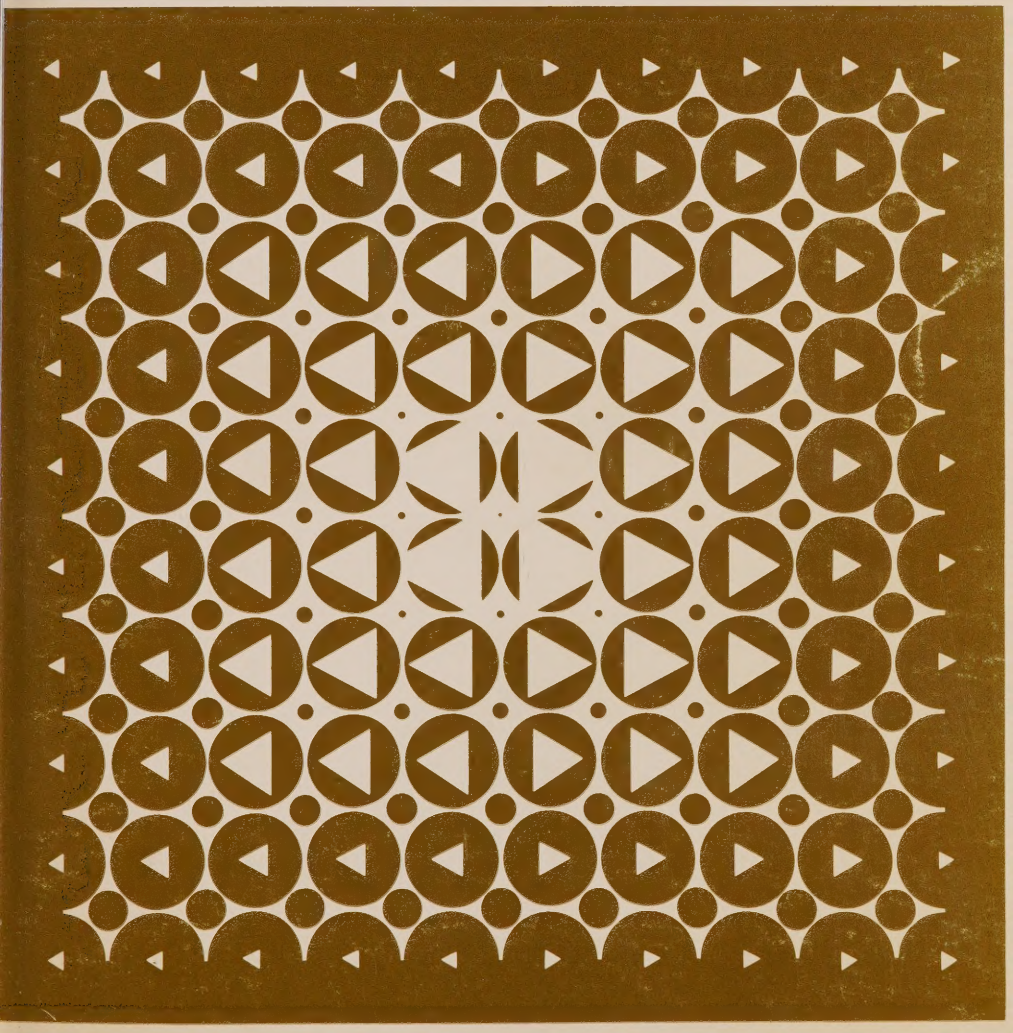
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The Political Economy of Business Bailouts

Volume 1

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The political economy of business bailouts

Volume 1

**Michael Trebilcock
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The political economy of business bailouts

Volume 1

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Preface

We commenced this study at the beginning of 1982 and completed the bulk of our research and writing by the end of 1984. As the study seeks to show, business bailouts by government have been a prominent feature of economic life in Canada since the early years of the nineteenth century and have gained a renewed public prominence over the past decade where governments (federal and provincial) have intervened in a number of widely-publicized cases of failing or faltering firms in attempts to salvage them. Since the research for this study was completed, further large-scale bailout efforts have been undertaken by government, the most notable being the recent abortive attempts by the federal conservative government to save two western banks, the Canadian Commercial Bank and the Northland Bank, at an estimated cost to Canadian taxpayers of about \$1 billion dollars. Thus, if the past is any guide to the future, business bailouts will remain an intractable policy dilemma for Canadian governments. This study attempts to illuminate the important features of this policy dilemma, drawing on legal, economic, and political perspectives, all of which were represented in the composition of the study team.

In undertaking this study, we owe a special debt of gratitude to officials in the federal Department of Regional and Industrial Expansion, the Department of Finance and other federal departments, officials with various departments and agencies of provincial governments, particularly the Ontario government, and officials from many of the firms under study, who provided invaluable comments on early drafts of our work, especially the case-studies that appear in volume II of the study.

We are also greatly indebted to John Evans and David Conklin of the Ontario Economic Council for guidance and criticism of our work as it

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The political economy of business bailouts

Volume 1

1

Introduction

THE NATURE OF THE ISSUES

In a market economy, risk-taking by economic agents, both firms and individuals, is an essential feature of the process of resource allocation. At least in theory, the price system appropriately compensates agents for the assumption of risks and creates economic incentives for the allocation of resources in the light of the risks entailed. In the nature of things, negative outcomes will sometimes materialize and economic agents will be required to bear the costs associated with them. Events may turn out differently, and if they do, the agents would be permitted to capture the rewards associated with their risk-taking. This is the essence of entrepreneurship in a capitalist system. In Joseph Schumpeter's memorable phrase, competitive markets involve 'a perennial gale of creative destruction' (Schumpeter 1975, 87). In such a process there are both winners and losers, but the economic dynamism fostered in a system that encourages private risk-taking will in the long run, so it is conventionally claimed, make society as a whole materially better off.

It will be obvious that the basic premises of such an economic system would be violated if private economic agents could take risks and capture the rewards if they turned out positively but effect uncompensated transfers of the risks to others *ex post* if they turned out negatively. A system that protected a private risk-taker from the bearing of costs would create perverse and highly inefficient economic incentives to undertake cavalier or irresponsible activities, whatever their risks and potential social value. Over time, this would result in a gross misallocation of society's

scarce economic resources. At the limit, it would be tantamount to allowing gambling with other people's money.

In the Canadian economy, we observe many firms that are realizing substantial economic successes, and we also observe a number of firms that are failing. In fact, from 1975 to 1982 the Federal Superintendent of Bankruptcy reports (Canada 1983) that 46,654 businesses went bankrupt. As shown in Table 1, the annual number of new-business bankruptcies jumped from 2,958 in 1975 to 10,765 in 1982. An unknown but substantial number of additional firms were privately liquidated either by voluntary termination or by creditor-managed receiverships. Professional experts in liquidation and receivership proceedings estimate that the number of private terminations of failing firms substantially exceeds the number of firms liquidated through formal bankruptcy.

In all of these cases, economic Darwinism was allowed to run its course. However, in a small number of other cases, governments at various levels in Canada actively intervened to bail out failing firms in an effort to avert this fate. In recent years this phenomenon has acquired a high public profile, with government bailouts of a number of major private-sector firms. Table 2 lists some of the more significant government bailouts of ailing or failing private-sector firms that have transpired since the mid-1970s. Several firms (Petromont, Domtar, Northland Bank, Canadian Commercial Bank) have involved the recently elected federal Conservative government, suggesting that business bailouts cannot be explained only in terms of party ideology.

The appendix to this chapter outlines the key characteristics of fourteen of the major bailouts of the past decade. These fourteen bailouts are examined in more detail in the case studies included in this volume. A study of the larger programmatic bailouts that were handled under the aegis of the federal Enterprise Development Program is also included along with the case studies. We have excluded the smaller bailouts that were handled, often at the regional level, by federal programs such as the Enterprise Development Program or Regional Development Incentives Program (now subsumed within the Department of Regional and Industrial Expansion) or by provincial programs such as those administered by the Ontario Development Corporation.

A central question posed by these studies is: why were these fourteen cases selected for bailout assistance out of a vastly greater number of business failures during this period? Or, to the extent that preserving jobs rather than firms *per se* was perceived as a major rationale for these

TABLE 1

Bankrupt estates accepted, 1975-82

	Number of consumers	Number of businesses	Total
1975	8,355	2,958	11,293
1976	10,049	3,136	13,185
1977	12,772	3,905	16,677
1978	15,938	5,546	21,484
1979	17,876	5,694	23,570
1980	21,025	6,595	27,620
1981	23,036	8,055	31,091
1982	30,643	10,765	41,408
TOTAL	139,674	46,654	186,328

SOURCE: Canada (1983)

bailouts, why the special consideration for the 40,000 jobs directly at stake in these companies in a period when 1.5 million other Canadians were unemployed?

The policy context in which these decisions were made is obviously highly important. The Canadian economic environment of the late 1970s and early 1980s, in which most of the major business bailouts that form the primary focus of this study occurred, was characterized by high levels of inflation and unemployment, sharp contractions in consumer demand, falling economic growth rates, extremely high interest rates, a sharp drop in the exchange rate for the Canadian dollar relative to the US dollar (and some other major currencies), and marked shifts in comparative advantage in international trade. These factors, many of them both interrelated and unanticipated, contributed to extreme uncertainty and a seriously depressed economy in which many firms found themselves under extreme financial pressure.

While the economic and political fallouts from these recent business failures clearly have posed problems of greater severity for government than did those business failures of the pre-recession period, governments at both the federal and provincial levels nonetheless began to initiate a large array of agencies and programs providing various forms of private-sector financial assistance as far back as thirty year ago.¹ The emergence of these policies and programs is obviously an important institu-

TABLE 2
Government bailouts since the mid-1970s

Company	Government
Atlantic fish-processing companies	Federal, Nfld., Nova Scotia
Canada Cycle and Motor (CCM)	Federal
Canadair	Federal
Canadian Commercial Bank	Federal
Chrysler (accepted but not utilized)	Federal, Ontario
Clarke Irwin	Ontario
Consolidated Computer	Federal
Co-operative Implements	Federal, Alta., Man., Sask.,
De Havilland	Federal
Dome Petroleum (proposed but not accepted)	Federal
Domtar	Federal
Electrohome	Federal
Halifax Industries	Federal, Nova Scotia
Maislin Industries	Federal
Massey Ferguson	Federal, Ontario
McClelland and Stewart	Ontario
Minaki Lodge	Ontario
Northland Bank	Federal
Petromont	Federal, Quebec
Petrosar	Federal, Ontario
Pioneer Chainsaws	Federal
Quebecair	Quebec
Ram Steel	Alberta
Whistler Village Land Company	B.C.
White Farm Equipment	Federal, Ontario

tional feature of the policy environment in which bailout decisions have been made and implies a greater receptiveness on the part of government to requests for assistance. However, these economic and institutional features of the policy environment by themselves provide few discriminating clues to the central question of why only a small group of those firms in need of assistance were actually helped.

A study of the political economy of business bailouts in Canada, then, must address several basic questions:

- Why do governments bail out some failing firms but not others?

- Are there sound economic rationales, consistent with efficient resource allocation, that may justify at least some of these bailouts?
- Are incentives created by our political system for collective decision-makers to intervene in some cases but not others? Will these incentives yield policy outcomes that are congruent with efficient resource allocation?
- Can economic or political analysis assist us in evaluating the particular choice of bailout instrument once a decision to intervene in some form has been made?
- Are the recent business bailouts by government merely a passing period piece, a peculiar function of current economic conditions, with few historical analogues and little future likelihood of replication, and thus of limited enduring moment for Canadian public policy-making?
- If potential business bailouts are likely to remain a major problem for Canadian policy makers, is there room for improvement in current policies so as (a) to reduce the incidence of bailout candidates? (b) to make superior choices about which failing firms to support with respect to bailout candidates that still arise? (c) to fashion more effective bailout instruments once a decision to support a firm has been taken?
- Does comparative experience from other countries offer any insights, at a positive level, into the factors that spawn bailout candidates, induce government intervention, or shape the choice of instrument of intervention, or, at a prescriptive level, into improvements that could be made in Canadian policy-making in this area?

THE STRUCTURE OF THE STUDY

In focusing on the bailout phenomenon as the subject of this study, a number of difficult definitional issues must be resolved. Government intervention designed to mitigate the difficulties faced by, or consequences associated with, failing private-sector firms may vary along different dimensions:

- The assistance may be directed to the private sector at large (e.g., through a reduction in the corporate-tax rate or a prime interest rate); it may be industry-specific (e.g., involve subsidies to the shipbuilding industry); it may be directed to particular classes of firms (e.g., small

businesses, or firms located within a particular geographic region); or it may be specific to particular firms.

– Where assistance is provided to failing firms, the assistance instruments employed may take widely varying forms: they may involve cash subsidies, loans at subsidized interest rates, loan guarantees, credit insurance, partial equity ownership, outright public ownership, tax relief (expenditures), trade-protection measures, government-procurement policies, regulatory protection, and permissively structured bankruptcy laws that facilitate corporate reorganizations. Some of these instruments are *ex post* in their orientation and attempt to deal with the consequences of failure; others are *ex ante* in their orientation and attempt to forestall failure. Moreover, within each instrument, modalities may also vary widely – for example, various conditions may be attached to direct forms of financial assistance.

– With respect to decisions on which failing firms to support and on what assistance instruments to employ, decision-making processes may vary widely. The process may be essentially bureaucratic in nature, especially where the decision is made under the aegis of an established program with a fixed budget, settled decision criteria, and a well-specified sequence of stages in the decision-making process. Alternatively, the process may be essentially political in nature, with few declared decision criteria and no clearly specified process for arriving at a decision.

– In the case of failing firms, assistance may be targeted not on the firms themselves but on the various subinterests that would suffer losses in the event of insolvency. For example, policies may be directed towards providing extended unemployment-insurance benefits to unemployed workers; adjustment assistance (severance payments or subsidized retraining) to workers in particular contracting industries; prescribed minimum-notice requirements for mass layoffs or prescribed minimum-severance payments in such event; wage credits or subsidies to induce re-employment of laid-off workers by other employers; new publicly supported investments in alternative business activities in the locality affected by a firm failure; subsidies to consumers to induce an increase in demand for the output of failing firms (e.g., retail sales-tax rebates).

For the purposes of our study of business bailouts, we have chosen to focus on three key definitional variables. We acknowledge, in the light of the above observations, that there is an element of arbitrariness in our choice of definitional variables and that, moreover, they are often not amenable to clear and mechanical application to particular cases. Yet, both because they seem to reflect the essence of what bailouts have come to imply in current public perceptions and in order to render the domain of inquiry tractable, we believe that our definitional variables are defensible. The requisite elements for a case to be considered a bailout in our study are:

- Government assistance is provided to *specific* firms (not industries or classes of firms or the private sector at large, and not to subinterests affected by firm failure), whether under the aegis of an established industrial-assistance program or on a pure *ad hoc* basis, and whatever the nature of the instrument chosen.
- Prior to receipt of assistance, the firms in question had an independent market 'life' or existence. Thus, we seek to exclude from the contemporary business-bailouts catalogue government assistance to new firms or industries, although we would include failing private-sector firms that have become crown corporations.
- Prior to receipt of the assistance, the firms in question had to be actually or potentially insolvent, i.e., unable to meet their financial obligations as they fell due or in a position where the value of their outstanding obligations was in excess of the fair market value of their assets. Insolvency must be distinguished from bankruptcy; the latter is a legal state in which an insolvent debtor performs certain acts that are taken as objective evidence of financial failure.

The study proceeds on the basis of these definitional criteria except for the historical and comparative discussions. Here, the criteria are relaxed so as to provide somewhat broader policy contexts in which to view the current bailout phenomenon.

With the central issues identified and the contemporary bailout phenomenon defined, the study goes on, in Chapter 2, to an historical review of Canadian experience with the provision of government assistance to failing firms. Canal construction in the 1820s to 1840s led, in one major case (the Welland Canal), to a public takeover of a failing

canal company. Railway construction during the first railroad boom (in the 1850s and 1860s) led to numerous grants of assistance to privately owned railway companies, both as inducements to undertake projects and as rescue assistance in later periods of difficulty. The second railroad boom – at the time of the construction of the transcontinental lines – led to governmental crisis assistance to the Canadian Pacific in the 1880s and to the ultimate public takeover of the Canadian Northern and the Grand Trunk–Grand Trunk Pacific during and immediately after World War I. The Depression exacted its most severe costs on the agricultural sector and led to the failure of the co-operatively owned Prairie wheat pools and the progressive takeover of these (later to take the form of the Canadian Wheat Board) by the federal government. In addition, special federal and provincial legislation was enacted to force restructuring of the debt burdens borne by farmers facing insolvency.

The period following World War II (and extending to the mid-1970s) was characterized by a very substantial growth in federal and provincial programs or initiatives designed to provide financial assistance to the private sector. With the emergence of strong regional-development forces and increasing decentralization of government functions, provinces began to play a more assertive role in attempting to stimulate local development. Often these attempts took the form of inducements to new businesses to locate in a province that were later followed by bailout type assistance when the ventures failed to meet initial expectations.

The chapter notes that crisis assistance provided to failing firms prior to World War II was relatively selective and amenable to rationalization in terms of major strands of the National Policy. Experience since World War II is much more varied and poses more difficult explanatory and justificatory challenges. Common themes throughout all these bodies of experience disclose a predilection on the part of the government for off-budget loan guarantees rather than other instruments of assistance and a relative willingness to contemplate public takeovers of failing firms if such firms are sufficiently salient to national or regional interests. Recurrent difficulties faced by governments in negotiating, monitoring, and enforcing terms of assistance and problems of opportunism, rent-seeking, and moral hazard in the relations between government and firms seeking or receiving bailout-type assistance represent another common historical theme.

Economic rationales for business bailouts

Chapter 3 is the first of four chapters that examine the economic rationales for business bailouts. A major factor often leading to a bailout is the income loss to displaced workers in the event of a bankruptcy and liquidation (or downsizing of an existing firm), and the associated adverse consequences for the community. Also identified with the bankruptcies of large entities are the general taxpayer liabilities that arise through increased government spending on such items as unemployment insurance and welfare payments.

This chapter looks at the potential sources of failure in the labour market and the relevance of these failures to the bailout phenomenon. Market failures are discussed under three general headings: market failure to achieve allocative efficiency; market imperfections; and market failure to achieve distributional equity.

Under a well-functioning labour market, a number of important results occur. First, wages will, on average, reflect the probability of bankruptcy and the associated disruption to the individual; this is *ex ante* compensation. Any compensation subsequent to a bankruptcy would constitute double payment. Second, income losses of workers who would have been displaced if no bailout were provided are not a real externality reflecting a market failure. Rather, they reflect an income transfer that is generated as resources, including labour, are reallocated to their most valuable end use. Some of this income loss also may reflect a loss of economic rents.

These income-loss issues are purely redistributive, and although their minimization or the shifting of their incidence through temporary bailout assistance may be a legitimate social objective, their existence does not imply a market failure that requires long-run government intervention. The long-run strategy must be to permit all resources to be reallocated to their most efficient uses; any other strategy would lead ultimately to more social problems, as well as severe pressure on communities, social services, transfer payments, and the tax base.

One legitimate market-failure argument concerns the potential problem that could arise with large numbers of displaced workers who cannot be redeployed without creating congestion externalities on other workers. In the bailout context, these externalities could arise in the following situations: where mass layoffs are involved in communities dominated by the failing firm; where workers are relatively homo-

geneous in their skills; where laid-off workers are likely to enter the pool of job-seekers rather than leave the labour market; and where the existing pool of unemployed workers is already large, perhaps due to a recession. These congestion externalities are likely to be more prominent when new firms are unable to enter or to take advantage of the existing labour pools. In short, given any of these situations, the present value of the adjustment costs to society may be less than what they would have been in the absence of a bailout.

The functioning of the capital market is addressed in Chapter 4 from the perspective of two underlying submarkets: the market for the redeployment of the assets of firms in financial distress, and the bankruptcy market in which the creditors decide on the disposition of their debtor's property. One theme which is common to the analyses of both submarkets is that any market-failure argument made to justify government intervention via the bailout instrument must be sufficiently precise to explain why governments intervene in some insolvencies but not in others. This issue is especially important for those market-failure arguments that imply a general interventionist policy.

With respect to the market for redeployment of assets, the chapter discusses how a properly functioning market would operate. Firms in financial distress could have their economic status resolved either through a restructuring of the existing creditors' claims and the injection of new funds, through the sale of the assets as a going concern, or through the liquidation of the assets. Under current practice, this resolution can occur through provisions in the Bankruptcy Act or through a receivership undertaken outside of the Act.

To investigate the conditions under which this market would fail to operate efficiently, an analysis of the markets in which new debt and equity are allocated is undertaken. Although seemingly unrelated to the market for the redeployment of assets, the decisions to liquidate a firm or to continue its operations (in some restructured form) have many of the same properties as the decision to lend money in the first instance. Thus market failure arguments that are relevant to the market for new funds may be important in the market for the redeployment of assets.

The chapter continues with a description of the origins of possible failures in the market for the redeployment of assets. These sources include the existence of transactions costs, uncertainty and the inability to diversify risk, moral hazard and adverse selection (also referred to as opportunistic behaviour), and the impact of other regulations such as

those of the (former) Foreign Investment Review Agency, takeover restrictions, and anticompanies legislation. One final source of potential failure is the availability of bailout assistance itself (either on a programmatic or *ad hoc* basis), and the incentives for opportunistic behaviour that it generates. All arguments are addressed at a theoretical level, and their deficiencies, if any, are noted. Any empirical evidence bearing on the existence of these market failures is presented as well. Finally, if market failure does exist, government intervention is indicated only if the resources expended in the intervention and any associated opportunistic behaviour are less than what the costs would have been of permitting the market to continue to function in its flawed state. One imperfect state of the world, then, must be seen in light of another.

Chapter 4 then goes on to consider the functioning of the bankruptcy market, again from the perspective of market failure. Upon the insolvency of a firm, its creditors, who have become the *de facto* owners, have to decide what to do with the assets (an allocative problem) and how to distribute the proceeds of liquidation or sale; if the firm is reorganized, the creditors must agree on what new securities should be created in the debtor's recapitalization. Creditors are aware of the potential for various classes of claimants to bargain for a share of the debtor's property that is in excess of their legal entitlement. Wealth redistribution among creditor classes comes about as a result of strategic behaviour. If creditors inserted in their debt contracts some rules and procedures to be followed in the event of insolvency and if these could be enforced and monitored at no cost, then the strategic-behaviour problem would disappear. Where substantial transactions costs are involved, however, strategic behaviour may occur. Its incidence in insolvency negotiations depends upon structural factors which affect the relative bargaining power of the various creditor classes and the interest groups within each class.

The existence of strategic behaviour can affect adversely the allocative and technical efficiency of the bankruptcy market. For example, reorganizations can be blocked or delayed by it, thereby imposing costs on employees, customers, and the community. In addition, liquidations (reorganizations) may occur when they are not the economically optimal response but serve only to redistribute wealth to certain creditor classes. It is also pointed out that certain provisions of existing bankruptcy

legislation that are intended to prevent strategic behaviour by the majority in fact can generate inefficiencies through minority holdouts.

The existence of these inefficiencies is a necessary condition for some form of government intervention either through revised bankruptcy legislation to ameliorate strategic behaviour or direct intervention through a bailout to prevent the liquidation of an insolvent firm that still has some long-run viability. However, the direct and indirect costs of intervention must be evaluated and compared to the costs of nonintervention before a firm conclusion can be reached as to its effectiveness.

This chapter concludes that the arguments explaining why markets for the redeployment of assets fail are not very persuasive from a theoretical (or even empirical) point of view. Although some arguments cannot be dismissed out of hand, it is not obvious that the government, through a bailout, can eliminate the market failures through cheaper monitoring or enforcement. As for the bankruptcy market, the potential for market failure exists and certain changes in legislation may be desirable; in contrast, bailout intervention to block an 'inappropriate' liquidation, although perhaps feasible, is costly and may prove ineffective.

A market failure alone cannot justify intervention. One must also ensure that the social benefits from intervention exceed the social costs. The issue of the costs and benefits of intervention through the bailout instrument are considered in Chapters 5 and 6. In Chapter 5, technical and conceptual issues involved in evaluating the benefits of a bailout are addressed. The focus of the analysis is on the employment benefits of the bailout that emanate from sustaining jobs in the failing enterprise. Due to restricted amounts of employment data on the bailout firms, the analysis remains at a conceptual level. Its purpose is to provide insights on a number of issues concerning the measurement of benefits from a bailout.

The major input in any analysis of the benefits of a bailout is the workers' income loss. The expected income loss is the difference between the workers' actual earnings in jobs preserved by the bailout and hypothetical earnings if there were no bailout and they are displaced to their next best alternative, which may involve a period of unemployment and/or of work at a lower-paying job. Three measurement procedures are presented and analysed: the estimation of the next-best-alternative earnings; the use of adjustment factors from other analyses; and the identification of specific market failures. The data requirements and analytical problems are the greatest for the first method and the least for the last.

Of the three methods, it is concluded that the market-failure analysis is preferable. This approach implies that in the absence of a well-defined market failure, the allocation of resources associated with an insolvency is likely to be socially optimal even though this may involve substantial income losses to some.

The final chapter that focuses on the economic rationales for business bailouts, Chapter 6, considers the structure and costs of bailout assistance. Since the reasons leading to financial distress and ultimately to bailouts differ widely, the elements of the financial-assistance packages may also differ for each bailout under analysis. The major element in all the bailout-assistance packages, however, is an infusion of new funds either directly from the government agency or indirectly by permitting the firm to access private capital markets. Other elements in the financing packages have included the following: the issuance by the company to the government of securities whose value is contingent on the success of the company; guarantees concerning employment, location, and R&D, and agreements by existing creditors (bond holders, financial institutions, and preferred shareholders) to reduce the size of their claims. It is demonstrated in this chapter that bailout assistance can result in wealth transfers to creditors and existing equity holders. The additional elements in the financing packages as identified above are methods by which any unintended, potential wealth-transfers can be neutralized.

A number of forms of bailout assistance are considered. These include cash grants, direct government-equity participation, subsidized loans (either made by the government at less than current-market interest rates or private loans for which the government pays part of the interest), loan insurance, and loan guarantees.

The costs of each of these forms of assistance are then analysed. Costs are of three types. The first, and easiest to estimate, are the direct or 'out of pocket' costs that reflect actual dollars flowing from the government to the firm: examples of such costs are cash grants and payment of a firm's interest charges above a predetermined level. The second type of costs reflects the opportunity costs to the government of accepting risk without commensurate compensation, e.g., through the provision of a loan to a troubled firm at an interest rate that is less than the current market rate, or the provision of loan insurance for a fee that does not reflect the actual risk of the insurance coverage. These costs are harder to estimate than those of the first type. The third type of costs, the most difficult type to measure, reflects the costs of the misallocation of resources resulting

from opportunistic behaviour by the owners (or managers) of the firms receiving the bailout assistance. Owners of the firms may undertake, for instance, very risky projects or utilize an unreasonably high ratio of debt to equity once the financial assistance is in place. In order to prevent this behaviour, costly monitoring procedures may be required.

From an analysis of the costs of these forms of assistance, it is concluded that the best way of providing assistance is to minimize the costs due to opportunistic behaviour and to ensure that the assistance is not viewed as permanent. The cash-grant approach appears to best meet these conditions. If the other forms of assistance are to be used, the government should utilize financial instruments, where feasible, that provide equity and whose value is conditional on the success of the firm. This would reduce the incentive to adopt opportunistic behaviour, since wealth transfers to the equity holders would be shared with the government. Further, these financial securities would be compensation for risk-bearing and thus would reduce the second category of costs – opportunity costs. However, countervailing considerations may arise out of the creation of significant numbers of ‘mixed’ enterprises with potential divergences between the objective functions of private and government shareholders and private-sector and public-sector accountability regimes.

Political rationales for business bailouts

Chapter 7 provides a framework for the analysis of business bailouts based on the workings of the political system. A political perspective on bailouts is advanced as a way of explaining how political factors come to be intertwined with economic factors in the bailout process. The analysis is predicated on the pursuit of self-interest by political actors. In order to establish those circumstances that induce a government to help a failing firm and those factors that determine the choice of instrument, the political perspective draws on two strands of analysis. The first focuses on the structural and organizational characteristics of the political economy that imply incentives to intervene in the affairs of a failing firm in support of narrowly defined interests. The organization of the economy, labour, business, and government itself are considered insofar as they determine the demand and supply of bailout policy. With regard to labour and business, the degree of integration within these groups shapes the extent to which they are likely to support wealth-maximizing

policies. It is the more fragmented organizations that tend to evaluate policy from a narrow perspective and seek to externalize their costs onto other parts of the political system. The type of economy that gives rise to demands for government bailouts is an open economy that has low welfare spending, decentralized labour organizations with local or regional strengths, fragmented business organizations, and arm's-length relationships between the banks and industry. The type of government – and public sector – that is most receptive to narrow demands for protection is one that fragments and decentralizes decision-making power.

The second order of analysis is a micropolitical one that focuses on how the incentive structures operate to shape particular adjustment-retarding policies. Using a public-choice framework, the analysis assumes that politicians are motivated by efforts to build electoral support. Each bailout is viewed as a wealth transfer that generates net political benefits for decision-makers. A behavioural pattern is predicted in which decisions to rescue failing firms may be discerned from the existence of a salient political constituency seeking assistance. The location and size of the marginal firm's workforce appear to be crucial variables. Politicians faced with both an intense, geographically concentrated political constituency that demands immediate subsidy and widely dispersed, largely unmobilized cost-bearers likely will engage in a political calculus that yields to the demand for subsidization.

A troubled firm can also be an indirect threat to a government's electoral future. The symbolic importance of such a firm may be that its bankruptcy would signal the failure of a central policy objective of the government. This link to broad policy objectives may serve to enhance the perceived benefits of intervention and may, through symbolic justification of the real costs, decrease the perceived costs.

The choice of bailout instrument is also determined within the same set of political incentives noted above. The basic strategy is to provide highly visible benefits to concentrated groups of marginal voters. For the most part, recent Canadian bailouts have largely entailed the use of loan guarantees to private-sector firms. Aside from providing highly visible benefits, loan guarantees are also politically attractive because they obscure costs, limit political accountability, and have only minimal structural requirements. However, if the government is likely to incur substantial monitoring and information costs when determining the appropriate subsidy and conditions governing the use of a subsidy, there

is an incentive to internalize those costs by bringing the firm into the public sector.

Overview of case studies

Utilizing the economic and political frameworks presented in previous chapters, Chapter 8 evaluates the case-study material in light of the theoretical material. First, the economic rationales for the bailouts are assessed. The case studies are evaluated with a view towards determining whether a bailout can be justified on the basis of a failure in labour, capital, or bankruptcy markets. We go on to consider the political constraints on the economically desirable policy outputs. The policy outcomes are then analysed in terms of the incentives facing political actors in each bailout context.

In this chapter, a brief summary of the salient features of each of fourteen case studies of bailouts are also presented. One of the studies is of the Enterprise Development Program (EDP). It offers an example of programmatic assistance, identifies a number of characteristics of companies that met the definition of a bailout and received assistance and also compares companies that filed proposals under the Bankruptcy Act to those that received assistance from the EDP.

Some common characteristics of the bailed-out firms become apparent. Most of the companies were suffering from general economic problems associated with the state of the economy (the recession, high interest rates) and their industry (declining markets and foreign competition). These were often exacerbated by firm-specific problems (high debt ratios and labour costs, managerial errors). Further, many had a history of government support that entailed a period of aggressive expansion. Another interesting observation is that one bank, the Canadian Imperial Bank of Commerce, was heavily involved in an unusually large number of the bailouts.

The ultimate economic outcome for the firms in receipt of bailouts varied. Some companies continued to require money to maintain operations. Others ultimately went into receivership upon subsequent insolvency. Still others were able to stage successful turnarounds; here, however, it must be remembered that a successful turnaround in the company's economic health is not necessarily a sign of a successful bailout, as this could have also happened by allowing the firm to proceed

through the normal capital-market channels. A successful bailout is one which staves off an inappropriate liquidation.

Considering first the labour market, economic theory offered two possible rationales for bailout assistance: to alleviate adjustment costs and government transfer payments or to postpone them to a time when the economy could better absorb them; and to minimize any congestion externalities that may be associated with mass layoffs in a specific community. Both of these arguments suggested that the assistance should be temporary. In the particular case studies, these arguments would appear only to apply to White Farm and Massey Ferguson, both with plants in Brantford, to Chrysler in Windsor, and to the Atlantic fish-processing plants. However, even though the bailout assistance was contingent on the maintenance of employment in certain areas, when these conditions were violated no penalties were imposed (as the firms may well have anticipated).

With respect to possible failures in the capital market, there is no evidence of such. The case studies demonstrated that the capital markets would have supported companies whose problems were transitory and redeployed through liquidation the assets of those with permanent problems. In a number of the case studies, bailouts occurred where the capital markets were not permitted to operate freely, but rather were subject to noneconomic constraints or were not permitted to operate at all.

In those situations that ended in insolvency, the capital markets at that point would still have been capable of redeploying the failed firm's assets in an orderly fashion. Thus, why the markets were not allowed to do so cannot be explained by any market-failure argument.

Considering the problem of strategic behaviour in insolvency, a number of the cases involved creditors who would have had the ability to put the firm prematurely into bankruptcy before other creditors had a chance to react. However, most creditors seemed to want to avoid this costly bankruptcy-liquidation route.

In summary, the only economic argument that supports government intervention concerns temporary failures in the labour market, and this argument appears relevant only in a few of the case studies.

Although the structural features of the Canadian political economy may shape a general propensity for government to deploy protectionist policies, the explanation of particular bailouts required a micropolitical analysis. Locating each case within that framework, three sets of

variables determined the distinctive array of political forces that predictably gave rise to interventions to rescue a marginal firm.

First, the decision to rescue was driven primarily by the particular distribution of real benefits and costs in each case. Providing concentrated high-visibility benefits to a group of marginal voters while obscuring and dispersing the costs onto nonmarginal voters was indeed a fundamental strategy. In the Chrysler, Massey Ferguson, and Canadair cases, the sheer size of the workforce that was prejudiced by the firm's failure created a salient political constituency for intervention. However, even smaller groups of workers could, depending on their geographic location, generate significant demands for protection.

Second, several bailout decisions based on rational political choice involved not only the allocation of material costs and benefits but also symbolic assurances that decreased perceived costs. Such assurances of the importance of the failing firm to the government's central policy objectives were evident in the Dome, Minaki, Whistler, and Canadair cases.

Third, the case studies revealed the importance of process as well as substance in determining policy outcomes. One of the most striking characteristics of the bailout cases was the inversion of the concept of sunk costs. For the politician, sunk costs were in actuality treated as seed costs that established a long-term commitment and clientele. Once the assistance began, governments often became hostages of the marginal firm, so that initial rescue decisions that appeared to entail a minor funding obligation became difficult to contain. Further, the ease with which the costs of a rescue could be obscured ensnared many politicians into individual decisions with seemingly low political costs that, however, when aggregated, were much less politically attractive.

The bailout instruments employed in the case studies were not a random mix. Their selection was largely a result of their functional attributes. Loan guarantees were most often the instrument chosen. These off-budget items provided direct and highly visible benefits to the targeted marginal firm. Their costs, on the other hand, were obscured and often not subject to normal parliamentary scrutiny. As the cost-bearers were dispersed and lacking information about the costs of assistance, they were vulnerable to the symbolic justifications given for the decision to assist.

The political attraction of turning a marginal firm into a fully or partially owned state enterprise could be traced to the substantial infor-

mation and monitoring costs of influencing the behaviour of a subsidized private firm. Public takeovers also permitted a highly visible assertion of the government's commitment to the particular policy objective represented by the firm.

In summary, arguments supporting government intervention that were based on political expedience applied in virtually all of the bailout cases. Self-interested utility maximization was more evident on the part of political actors than was any desire to increase economic efficiency. Thus, bailouts can best be understood as part of politicians' basic strategies to enhance their prospects for staying in power by 'magnifying the gain and depreciating the pain' of income redistribution.

The comparative perspective

Chapter 9 analyses corporate bailouts from a comparative perspective that encompasses the recent experiences of five nations – Britain, France, Japan, the United States, and West Germany – in coping with the problems of enterprise failure and industrial decline. The discussion covers both normative and positive questions that arise from an international survey of bailouts. From a normative standpoint, there are indications of a link between a nation's bailout practices and other laws and policies that affect growth and productivity. Countries with fast-growing economies sometimes rescue failing firms, but they tend to do so through legal arrangements and subsidy programs designed ultimately to promote the adjustment of labour and capital. Some of these institutional practices may be difficult to replicate in a Canadian context. These would include the intrafirm transfers of workers in Japan and the interlocking relationships between banks, industry, and government that prevail in France, West Germany, and Japan. Other laws and policies, such as Chapter XI of the United States Bankruptcy Code and labour-adjustment schemes employed in West Germany, might have more to contribute to adjustment processes in the Canadian economy.

From a positive viewpoint, this chapter advances the argument that certain structural differences in the political and economic institutions of these five countries provide a partial explanation for the observed differences in their propensity to bail out failing firms. Three kinds of institutional structures are discussed for all of the countries surveyed. First, the structure of labour-management relations at the level of the firm may influence the willingness of workers and employers to co-

operate in responding to market incentives for adjustment. There is likely to be less political pressure for bailouts when labour and management formulate arrangements designed to share the private costs generated by market changes. Second, the organizational structure of a nation's political interest groups such as unions, trade associations, and political parties may be a good predictor of the kinds of economic policies they will advance and support. Umbrella organizations, such as lobbying groups that contain most major firms or unions in a nation, must internalize most of the costs and benefits of economic policies and, as a result, their leaders will be much more likely to oppose bailouts, which usually lead to net reductions in national wealth. Finally, certain structural features of national political processes can exert substantial influence on the propensity to bail out insolvent firms. Constitutions and bureaucratic arrangements that fragment or decentralize decision-making power can operate to reduce the political opposition to bailouts and other measures that redistribute wealth to particular industries and firms. This last hypothesis considers the causal relationship between the design of decision-making procedures and the substantive content of national economic policies.

Prescriptive implications

Chapter 10 lays out some prescriptive implications suggested by our study of bailout policies in Canada. The chapter explores three types of policy options:

- policies that facilitate private-adjustment processes and reduce the incidence of bailout candidates
- policies that determine which residual failing firms should receive government assistance of some kind
- policies that influence the choice of the particular instrument of assistance (or the mix of instruments) once a decision to intervene in principle has been taken.

With respect to policies that might reduce the incidence of bailout candidates, a number of possible strategies are canvassed. Bankruptcy-law reforms are proposed that would facilitate corporate reorganizations by reducing transaction costs and incentives for particular creditors to

engage in strategic behaviour. Policies that inhibit mergers of failing firms and other firms, such as antitrust policies, foreign-investment controls, and securities and corporate laws, are critically evaluated. Tax-policy changes are proposed that would permit firms facing financial difficulties to use their losses to generate cash flows, either through refunds from the revenue authorities or through sale of loss deductions to other companies. Labour-oriented adjustment policies are canvassed that emphasize greater worker mobility, e.g., through retraining, mobility-assistance grants, wage subsidies, and pension portability. Firm-oriented adjustment policies that, again, emphasize adjustment rather than protection are also reviewed.

As to when government should bail out residual failing firms, economic analysis suggests that labour-congestion externalities that arise when large or concentrated workforces are released suddenly onto already depressed labour markets may be the most powerful economic rationale for intervention. The most potent political pressures usually also run in the same direction. However, the costs of a bailout, even in this context, must be set against the benefits in order to determine whether or not the bailout provides gains in economic welfare. Nonetheless, political considerations may militate against the costs being weighed as heavily as the benefits.

Only perhaps four of the fourteen case studies undertaken for the study seem even *prima facie* candidates for assistance under the labour-externalities approach. This suggests that there is substantial room for more discriminating decisions on which failing firms to rescue. Decision-making undertaken at the political level might be improved by a more accountable political process that is enhanced by stricter budgetary oversight of bailout expenditures and more public disclosure of the information considered in reaching a decision. With smaller-scale bailouts, where the decision-making process is bureaucratic rather than political, a more rigorous screening process, employing tightly defined economic criteria for intervention and a careful evaluation of the costs and benefits of a bailout, would seem likely to improve the quality of the decisions.

As to the choice of instrument once a decision to bail out has been made, it is suggested that less reliance be placed on loan guarantees. These attenuate political accountability, provide little incentive to reduce debt-intensive capital structures, and create problems of opportunism and moral hazard. Greater reliance on cash grants (on a one-time-only basis), perhaps supported by share warrants or income deben-

tures which impose no immediate servicing burden on the company but remove all or some of the wealth transfers otherwise implicit in the grants, is suggested as an alternative. Whatever the form of the direct assistance, greater care should be taken to ensure that the terms of assistance facilitate needed adjustments in an industry rather than merely perpetuating an economically nonviable status quo.

Government support of employee bailouts of failing firms is viewed as another possible instrument of intervention where the full social costs of a firm's decision to close an activity may not be fully internalized into that decision. Workers who are bearing a significant portion of these social costs may be prepared to operate a plant at a rate of return below that acceptable to a private investor. However, problems of capitalization and to a lesser extent of managerial expertise suggest a limited role for employee buyouts in this context – perhaps one that is confined to smaller firms that are labour- rather than capital-intensive.

Public enterprise may be the most limiting response open to a government faced with the prospect of failure of a major private-sector firm. Where government seeks to pursue a multiplicity of policy objectives through the maintenance of a given economic activity, or where its objectives cannot be precisely defined or are rapidly evolving, the internalization of decision-making within a public enterprise may be a better strategy than the establishment of alternative 'legal orders' regimes directed to the private sector. Again, where private owners' stakes in a firm have been seriously attenuated by prior grants of government assistance (that perhaps have been supported by equity issues), the incentives of private management to manage the firm's resources efficiently may in turn become seriously attenuated. On the other hand, public enterprise poses serious incentive and accountability problems of its own that are not readily resolved and that call for a tight balance between efficient government oversight to inhibit managerial incompetence or idiosyncracies and sufficient autonomy for organizational dynamism and entrepreneurship to be encouraged.

The chapter concludes with the view that if the past is any guide to the future, bailouts will remain a difficult problem for Canadian policy makers. Indeed, with increasingly rapid changes in our economic environment, bailouts may become an even more acute problem in the future. In this sense, the role of business bailouts must be viewed in the larger context of our processes of economic adjustment.

NOTE

- 1 See the section on postwar financial-assistance programs in Chapter 2 of this volume.

CHAPTER 1 APPENDIX

BAILOUT CASE STUDIES - ESSENTIAL CHARACTERISTICS

Firm	Industry	Number of employees at time of bailout		Date of bailout	Nature and scale of assistance	Outcome
Chrysler Canada (Windsor, Ont.)	automobile manufacturer	10,300		May 1980	Federal - loan guarantees of \$200 million Ontario - loan guarantees of \$33 million - grant of 10 million	Loan guarantees not taken up
Massey Ferguson Ltd. (Brantford, Ont.)	agricultural equipment	6,500		Feb. 1981	Federal - guaranteed the sale of \$125 million of preferred shares Ontario - guaranteed the sale of \$75 million of preferred shares Banks - reduced interest and purchased shares	Both governments honoured their guarantees; Ottawa received 62% nonvoting shares in the equity issue

CHAPTER 1 APPENDIX (Cont'd)

Firm	Industry	Number of employees at time of bailout	Date of bailout	Nature and scale of assistance	Outcome
Canadair Ltd. (Ville St. Laurent, Que.)	aerospace	7,400	1976 - Crown ownership; 1982 (Nov.) - control of CDIC ^a	Federal - \$650 million in equity; \$1.35 billion in loan guarantees	Mar. 1984 - Canadair restructured; new Canadair assumed the assets and and liabilities and has a positive net worth. Canadair was left with \$1.4 billion debt which will be serviced by the CDIC ^a
White Farm Equipment Canada Ltd. (Brantford, Ont.)	agricultural equipment	1,024	Mar. 1981	Federal - \$10.5 million in loan guarantees Ontario - \$8.3 million in loan guarantees	In receivership. If purchased by new owners, Ottawa and Ontario will lose their money

CHAPTER 1 APPENDIX (Cont'd)

Firm	Industry	Number of employees at time of bailout	Date of bailout	Nature and scale of assistance	Outcome
Cooperative Implements Ltd. (Winnipeg, Man.)	agricultural equipment	1,364	Apr. 1978	Federal - \$8 million interest-free loan	Operational
				Alberta - \$1.5 million in loan guarantees	
				Saskatchewan - \$2.6 million in loan guarantees	
				Manitoba - \$2.8 million in loan guarantees	
				Co-op groups - \$9.5 million loan	
			Feb. 1982	Federal - \$21.5 million in loans and loan guarantees	
				Alberta - \$1.5 million in loan guarantees	
				Saskatchewan - \$2.4 million in loan guarantees	
				Manitoba - \$2.9 million in loan guarantees	
				Co-op groups - \$9.5 million in preferred shares	

CHAPTER 1 APPENDIX (Cont'd)

Firm	Industry	Number of employees at time of bailout	Date of bailout	Nature and scale of assistance	Outcome
Minaki Lodge Resort Corp. (Minaki, Ont.)	hotel	n/a	Oct. 1974	Ontario - \$45 million in expenditures	Operational
Clarke Irwin (Toronto, Ont.)	publishing	n/a	1972-1980	Ontario - \$1.5 million in loan guarantees	Receivership. Clarke Irwin defaulted on loan guarantees. Purchased by the Book Society of Canada (Agincourt, Ont.)
Whistler Village Land Co. (Whistler, B.C.)	skiing and recreational complex	n/a	Jan. 1983	Total British Columbia investment - \$20 million	January 1983 - British Columbia created a crown corporation, WLC Develop- ments, from the assets of the Whistler Village Land Co. Operational

CHAPTER 1 APPENDIX (Cont'd)

Firm	Industry	Number of employees at time of bailout	Date of bailout	Nature and scale of assistance	Outcome
Canada Cycle and Motor Ltd. (Toronto, Ont. and St. Jean, Que.)	manufacturer of sporting goods and bicycles	700	Mar. 1978	Federal - \$19.2 million in loan guarantees	In receivership
Electrohome Ltd. (Kitchener, Ont.)	consumer-electronics services, industrial electronics, communications, furniture	2,240	Dec. 1977	Federal - \$15 million in loan guarantees	Recovery and diversification. Ottawa profited \$10 million when it exercised a share option
Consolidated Computer Inc. (Ottawa, Ont.)	computer-hardware manufacture	n/a	1970-81	Federal - \$119 million in loan guarantees and grants Ontario - \$6 million in loan guarantees and grants	Nov. 1981 - CCI was sold to Nabu Manufacturing Corp. (Ottawa Ont.) Mar. 1984 - Nabu placed CCI in receivership. Total government losses of \$125 million

CHAPTER 1 APPENDIX (Cont'd)

Firm	Industry	Number of employees at time of bailout	Date of bailout	Nature and scale of assistance	Outcome
Maislin Industries Ltd. (Que., Ont., Maritimes, Eastern US)	trucking (service sector)	4,000 (2,000 in Canada)	July 1982	Federal - \$34 million in loan guarantees	In receivership. Ottawa lost \$34 million
Dome Canada (Northern Canada)	oil and natural-gas exploration and development	9,950	Feb. 1985	Dome and its creditors rescheduled until 1988 re- payment of \$3.6 billion of Dome's total debt of \$5.3 billion	Operational

CHAPTER 1 APPENDIX (Cont'd)

Firm	Industry	Number of employees at time of bailout	Date of bailout	Nature and scale of assistance	Outcome
Atlantic Fisheries (Nfld., N.S.)	fisheries	31,000 (in processing sector)	Sept. 1983	<i>Newfoundland</i> Federal – \$75.3 million in equity, \$25 million in loan guarantees Newfoundland – conversion of \$31.5 million in loans into equity Bank of Nova Scotia – conversion of \$44.1 million in loans into equity	Fishery Products International Ltd. is owned 60% by Ottawa, 25% by Newfoundland, 12% by the Bank of Nova Scotia, 3% by its employees, and is currently operational. The company has sought additional federal funds of \$100-\$125 million
			Oct. 1983	<i>Nova Scotia</i> Federal – \$10 million in preferred shares. – \$70 million to Bank of Nova Scotia to release H.B. Nickerson from its debt obligation of \$100 million	Operational. National Sea Products Ltd. is owned 20% by Ottawa, and 80% by private interests

^a Canadian Development Investment Corporation

SOURCE: Unless otherwise indicated, the data in this table has been drawn from the case studies in Volume 2.

2

The bailout phenomenon in an historical perspective

INTRODUCTION

In examining the major recent business bailouts in Canada, we suggest that two areas of research are paramount. First, we must attempt to discover why government intervened at all to save these failing firms (and not others). Second, it is important to uncover those factors that determined the class of governing instrument as well as the particular elements of the various rescue packages once a commitment to rescue was made.

It might, of course, be argued that both sets of issues could be explained, for the most part, as being a function of the recent and serious recessionary economic environment in which Canada has found itself and thus that few general lessons can be learned from the past as to likely patterns of bailout cases or appropriate policy prescriptions for dealing with such cases now or in the future. In short, it might be argued that the recent cases are *sui generis*, a passing period piece, that do not readily yield durable or general policy implications.

In this chapter, however, we attempt to draw on some episodes in Canadian economic history that seem to suggest that the bailout phenomenon is by no means without historical precedent nor a product of recessions exclusively. Rather, bailouts appear to have been a recurrent and problematic issue of public policy over almost a century and a half of Canada's economic development. In addition, the historical perspective illuminates both of the central areas of research noted above – the economic and political circumstances that are likely to generate the bailout phenomenon, and the factors that are likely to have a bearing on

the choice of governing instrument invoked in attempts at salvage. The existence of an economic recession in itself provides few, if any, clues as to which (of a presumably increased number of) failing firms a government will choose to bail out or which instruments will be invoked, unless any budget constraints that are a function of a recession imply special sets of policy considerations on that account. At a prescriptive level, the historical experience is also suggestive of the problems that governments are likely to encounter with various forms of firm-specific bailout assistance.

EARLY CANAL CONSTRUCTION

The period of the early 1820s to the late 1840s was one of substantial development of a canal system in Upper and Lower Canada that was to provide navigation links along the St. Lawrence River or by way of the Ottawa River and Rideau Canal through Lake Ontario to the western end of Lake Erie and, by way of Detroit, to Lake Huron, Georgian Bay, and as far as Sault Ste. Marie (Glazebrook 1964, 1:84).

Most of the canal construction during this period was undertaken directly or indirectly by government. The intertwined roles of the public and private sectors that characterized much of Canada's early economic development was reflected as early as 1821, when, despite generous stock purchases by the imperial and provincial governments, the Company of the Proprietors of the Lachine Canal was taken over by the province after having made almost no progress in two years. The province then undertook construction itself (Hardin 1974, 55). The major exception to the practice of government construction was the Welland Canal, which was to link Lake Erie and Lake Ontario in the Niagara district. Construction of this canal was undertaken by a private company, the Welland Canal Company, which was chartered by the legislature of Upper Canada in 1824 and promoted by William Hamilton Merritt, a St. Catharines businessman, as well as other businessmen from the St. Catharines area. Merritt saw opportunities for the company to capture a significant share of the western freight business, especially grain freight, from both Canadian and American sources.

Of the eight initial directors of the Welland Canal Company, three were members of the Legislative Council of Upper Canada. The initial capital was raised by private subscription in the Canadas, New York, and Britain, although the governments of Upper and Lower Canada in

1827 subscribed for £50,000 and £25,000 of stock respectively. In 1826, the government of Upper Canada lent the company a further £25,000. In addition, the British government made the company a substantial land grant (13,400 acres) and a loan of £50,000 in 1828.

From the beginning of construction in 1829 through the early years of operation, the company encountered persistent financial problems that included: unanticipated and costly engineering difficulties; problems in attracting private sources of equity and loan capital; political pressures to enlarge the project, modify the route, and add port amenities, etc.; following completion of the canal in 1833, competition for business from the Erie Canal; and an economic recession in the latter part of the 1830s that sharply curtailed revenues. These financial difficulties led to repeated petitions to the government of Upper Canada for further loans or stock subscriptions. The government generally acceded to the petitions in whole or in part, although often not without rancorous debate and criticism. Through the 1830s, in the face of continuing operating deficits, the government increasingly became the major financial underwriter of the company's operations, and assumed a majority position in appointments to the board of directors. By December 1836, the government of Upper Canada, having underwritten slightly over half of the company's expenses of about £500,000 since 1824, owned 43 per cent of the total stock of the company. In 1839, the government decided to buy out the remaining private stock in the company in exchange for provincial debentures. In all, assistance to the Welland Canal Company amounted to approximately 23 per cent of the total provincial debt of £1,179,949 in 1840. In 1843, the company finally passed out of existence as a separate legal entity.

In his account of the life of the company, Aitken (1954) points out that from an early stage it had 'degenerated into a privately-controlled institution for the disbursement of public funds'. He goes on to note:

The strategy which the Company would follow in seeking future public assistance was ... based on the assumption that no legislative body concerned with the welfare and security of Upper Canada would suffer the Company to die. If this were conceded, the rest followed almost automatically. Unless further aid were forthcoming, the Company would have to cease operations, the parts of the canal already built would fall into decay, and an unfinished canal was worthless. Unless further aid was granted,

therefore, the investment already made by the public would be completely lost. The more capital the legislature invested in the canal, the more it had to invest to preserve its earlier investment. (Aitken 1954, 86)

Rationales for government assistance

In analysing the reasons for the financial failure of the company, Aitken argues that throughout its existence it was in a very real sense an instrument of state policy (ibid., 133) and that, in part for this reason, the individuals who were conspicuous in its management were better known as politicians than as businessmen (ibid., 135). While the company may have been a financial failure, Aitken argues that it did however accelerate the development of the western part of the province of Upper Canada and of the Niagara peninsula and also broke the monopoly that the Erie Canal would otherwise have held over the commerce of western Upper Canada. To this extent, government intervention to counter the monopoly can be considered as having a market-failure rationale. Assessing the place of the Welland Canal in the larger context of Canadian development, Aitken sees it as the first major step in a program of canal construction that set the pace for the development of the St. Lawrence economy during the next quarter century: 'No single link in the St. Lawrence canal system could realize its full potentialities until the whole chain has been forged' (ibid., 136). This is an external-economies or 'investment trap' rationale for suboptimal private investment as well as, again, a market-failure justification for public involvement. In addition, Aitken relies on the inherent scarcity of private capital due to weakly developed local capital markets as an explanation for the company's failure (ibid., 135), although in fact this may be a variant of the previous argument.

In evaluating the government's response to these potential market-failure arguments for intervention, Aitken states:

The characteristic defects of the device [the form of assistance] unfortunately, were also present: the inevitable presence of political pressures upon Company policy; the difficulty of securing agreement among directors who were responsible to different groups with partly conflicting interests; the lack of procedures for insuring effective surveillance over the expenditure of public moneys; and the tendency for corporate survival

to become dependent more upon effective lobbying than upon efficient management. (Ibid., 134)

THE FINANCING OF THE RAILWAYS

Unlike the St. Lawrence waterway system, which with few exceptions (e.g., the Welland Canal Company) was publicly developed and operated, the railway system in Canada for the most part was privately developed and operated. Nevertheless, the railway system still benefited from very substantial public-sector financial assistance. In addition, rather like the experience with the Welland Canal Company, several of the privately developed railway systems ended up in a state of apparently chronic insolvency and were taken over by the federal government. Such systems included the Grand Trunk, Grand Trunk Pacific, and the Canadian Northern. These lines, along with the government-owned Intercolonial, National Transcontinental, and Prince Edward Island Railway systems, were reconstituted as the Canadian National Railways during and immediately after World War I. Further, the Pacific Great Western Railway (later renamed the BC Railway), which was also in a state of insolvency, was taken over by the British Columbia government in 1918.

While this is not the place to retrace in detail the amply documented, albeit complex, history of railway development in Canada, certain features of the interface between the private and public sectors are illuminating in the context of a contemporary study of the political economy of business bailouts.

Unlike most of the major recent bailouts analysed later in this study, various levels of government tended to be intimately involved in the initiation of most major railway projects. This involvement was in several areas: the negotiation of routes; the legislative conferment of corporate charters at the request of groups of entrepreneurs; subsidies in the form of land grants, cash, and tax exemptions; capital contributions in the form of shares, loans, or (most commonly) loan guarantees; and the granting of monopolistic franchises. From their beginnings, the railways were clearly seen as a major instrument of public policy in shaping the political and economic development of Canada. In the 1850s and 1860s (the first major era of railway development), railway construction was largely motivated by the threat to the St. Lawrence economy and to Montreal as a major entrepot that was posed by growing incursions from American canal and rail systems. These incursions were eroding

Canada's hopes of capturing a major share of the through traffic in grain and other freight from the American midwest. The strengthening of east-west rail linkages in Canada to allow access to all-weather ports in the Maritime provinces or the United States was seen as a necessary response if the development of the St. Lawrence economy was to be enhanced. The construction during the 1850s of lines from Sarnia to Toronto and on to Montreal by the Grand Trunk Railway, from Detroit to Buffalo by the Great Western, from Toronto to Collingwood on Georgian Bay by the Northern, and from Montreal to Portland by the St. Lawrence and Atlantic railway reflected that response. In 1850, there had been sixty-six miles of railways in the British North American colonies. By 1860, there were 2,065.

The second major construction era, entailing the development of a transcontinental rail network, began with: the completion in 1876 of the Intercolonial, which linked the Maritimes to Quebec; the commencement of work by the Canadian Pacific Railway in 1880 on a western railroad from northern Ontario to British Columbia (completed in 1885); the development in the first years of this century of two further transcontinental routes linking western and central Canada (the Grand Trunk Pacific and the Canadian Northern); and, also in the early 1900s, the development of a line running from Winnipeg to Moncton (the National Transcontinental). All of these various ventures were privately sponsored (albeit with substantial public assistance) except for the Intercolonial and the National Transcontinental, which were both publicly constructed and operated.

This period of construction of a transcontinental-railway system was even more strongly imbued with political considerations than was the first period. New Brunswick, Nova Scotia, and British Columbia had made it an explicit condition of joining the Confederation that these transcontinental rail linkages be constructed. Beyond this, the National Policy pursued by Canada after Confederation was centrally predicated on the development of east-west economic linkages, the elimination of internal barriers to trade, the erection of external trade barriers behind which local industry might develop, the development of a railway system coupled with immigration and homesteading policies to open up the rural hinterland, and the progressive integration of economically complementary sectors. In short, the whole conception of Canada as a political and economic entity implied a central role for the railways as a major policy instrument of a new nation.

Rationales for government assistance

Several features of the inevitably close, continuous, and complex interaction between the private sector and government implied by the conception of the railways as private agents with a major public purpose are of interest to us. First, it is clear that a number of railroads would not have been built either at all or at the times they were without substantial government assistance. In Fogel's words, they represented 'premature enterprise' designed to prompt rather than respond to economic development (Fogel 1960, 18). To the extent that future economic development in general was itself also contingent on future government policies concerning, for example, subsidies to farmers, immigration, tariffs, rate regulation and approval of competing lines, the railroads undoubtedly would have faced substantial risks in the absence of commitments of support to them by government.

Dales remarks of the Canadian Pacific Railway: 'The railway had to be built for political reasons, whatever the subsidy involved. . . . Sensible economic policy required only that the subsidy be kept as low as possible' (Dales 1964, 304). Thus, government, from the outset, typically found itself in a delicate position. While in principle it had decided that the private sector possessed a comparative advantage over the public sector in constructing and operating the railroads, as a major (often the major) source of financing it still was required to make decisions regarding the form, scale, appropriateness, and necessity of any particular railroad – decisions which, almost by definition, it had acknowledged that it was in many respects ill-equipped to make. The railroads in turn found themselves in the delicate position of having their future profitability dependent on a number of nonsubsidy policies of the government.

One implication of this relationship between the private and public sectors was that the government was poorly equipped to evaluate repeated entreaties by the railways for further assistance and to monitor and enforce adherence to the terms of assistance. For example, Peter George calculates that in 1885 constant dollars, *ex post* excessive subsidies (in excess of a normal, competitive return) of between \$30 million and \$50 million were received by the Canadian Pacific Railroad from all levels of government in its early years of operation. Total subsidies received as of 1885 (in constant dollars) were estimated at between \$103 million and \$120 million, depending on the assumed interest rate (George 1968). In the earlier railway-construction phase

(1850-1867), much the same picture emerges. Some \$33 million was added to the Canadian provincial debt as a result of aid to the Grand Trunk, the Great Western, and the Northern (leaving aside the many smaller lines), much of it involving 'excessive waste and excessive drains on the public treasury' (Easterbrook and Aitken 1956, 317).

Government often found it difficult to resist the ongoing demands of the railways for further assistance or concessions largely because to compromise the completion of a project or force its termination would have been publicly perceived as an acknowledgement of politically costly prior mistakes. But because of such strong political incentives to maintain projects, governments became vulnerable to strategic behaviour on the part of the railways. For example, Naylor writes that in the case of the Canadian Pacific Railway (CPR),

financial difficulties, real or concocted, led to new demands for public assistance. In 1884, George Stephen [of the CPR] presented himself in Ottawa with a hair-raising tale of the adversity and misfortune that would follow the collapse of his line. The Bank of Montreal and other banks would fail; high unemployment would stalk the land; a long string of wholesale houses, including that of the Honourable Frank Smith, a member of the Cabinet, whose credit advances had been an important part of the CPR short-term financing, would go bankrupt; and Canada's credit abroad would be ruined. The government was ready to comply (Naylor 1975).

In the case of the Canadian Northern, Regehr (1967, 460) notes that 'the very nature of the alliance between government and business provided considerable opportunity for corruption Few businessmen have been as frequently or as bitterly accused of political manipulation as William Mackenzie and Donald Mann [the principal shareholders in the company]'. For example, in 1913, following a grant of \$15 million to the ailing company, a government member asked: 'I wonder if the government today knows how much of the \$15m of the people's money goes into railway extension or goes to make these gentlemen richer by aiding their investments in all parts of the world?' (Brown and Cook 1976, 202). Hardin, in a similar vein, refers to the Canadian Northern as 'run by true master pickpockets of the public purse' (Brown and Cook 1976, 75). However, a 1914 government committee of inspection, while discovering

that the company's affairs were a chaotic maze of complex dealings, found that Mackenzie and Mann had been entirely honest and had not been milking the public through the company, and that the company's need for assistance was very real (*ibid.* 203; Innis 1923, 120 *et seq.*).

In the case of the Canadian Pacific Railway (CPR), Naylor's (1975) comments reflect a somewhat unsympathetic view of the relations between the company and the government. More authoritative accounts of the building of the CPR (McDougall 1968, ch. 6; Berton 1971, 247 *et seq.*) and its financing acknowledge the genuineness of two crises faced by the company in 1884 and 1885 and the necessity of special governmental assistance (principally in the form of loans that were very quickly repaid after the transcontinental line began operating in 1885). The company had faced an unexpected decline in the marketable value of railway securities, a decline in railway freight rates, and a collapse of the land boom that made land-grant land impossible to sell. The principal shareholders in CPR had contributed most of their personal wealth to the company and mortgaged their remaining assets to secure lines of credit to the company. However, the point remains that the kind of suspicions implicit in Naylor (1975), in some cases well-founded, in others not, are endemic to the type of relationship between company and government entailed in most of the major railroad-development projects, and are very difficult for government or other analysts to evaluate.

Governing instruments and rent-seeking

In terms of the choice of instrument of assistance, since politicians faced strong incentives to minimize ostensible costs, their strong preference, beginning with the Guarantee Act of 1849, was for off-budget loan guarantees that were provided by legislation, Orders-in-Council, or informal executive commitments of dubious legality (Easterbrook and Aitken 1956, 421, 430; Naylor 1975, 1-24). For example, Currie notes that:

between 1856 and 1861 the Province of Canada had made extraordinary advances to the [Grand Trunk Railway] company totalling about \$4m None of the advances had been sanctioned by Parliament and all but three had been made by an individual Minister on his own responsibility without consulting the Cabinet. In some instances no interest was charged. Often loans were made by the Bank of Upper Canada with the Cabi-

net's consent and under provincial guarantee but without going through the Government's books of account. (Currie 1957, 91)

In a similar vein, Regehr states that Prime Minister Robert Borden, during the death throes of the Canadian Northern, privately and confidentially informed the President and General Manager of the Canadian Bank of Commerce that the federal government would protect the Bank against possible losses if it would advance funds as required by the railway company to meet interest payments and maturing short-term loans. This informal guarantee – of dubious legal validity – was given without parliamentary authorization, and the President and General Manager of the Bank provided \$6 million in advances allegedly without obtaining the approval of the Bank's full Board of Directors (Currie 1957, 408). The guarantee instrument used served to make the costs of government support uncertain, attenuate political accountability, and encourage a number of railway companies to adopt a highly leveraged capital structure.

Political aversion to involvement by American railway companies or entrepreneurs in the construction of Canadian lines, prompted largely by fears that such an involvement would lead to northern extensions of American sources of risk capital and expertise, accentuated the dependence of the private sector on government-provided capital. The fact that domestic sources of private capital and the local markets to be served were very much smaller than in the United States while the tasks of construction were almost as large made government financial assistance almost inevitable if the projects were to proceed. Because of this dependence, always real though sometimes exaggerated, a great deal of the energies of senior management of the railways were diverted into what, in the contemporary economic literature, would be called rent-seeking behaviour. Like the experience with the Welland Canal Company, running a viable railway depended as much on cultivating satisfactory relations with government as on technical managerial expertise. A limiting example of rent-seeking behaviour was the payment of the election expenses of some leading members of the Conservative government by one group of railway entrepreneurs that were seeking the government's endorsement of its proposed Pacific route. These payments led to the 'Pacific Scandal' and the resignation of Macdonald's government in 1873.

Sir Edmund Hornby, who came to Canada from Britain on Grand

Trunk business in the 1850s, left the following impressions of relations between governments and the railways:

my work was almost exclusively 'Lobbying' to get a Grand Trunk Bill through the house of Representatives [sic]. . . . The Canadian Ministers were willing enough but weak – the majority a doubtful quantity, and, although up to the last moment I felt there was a chance of getting the Bill through, I was always doubtful, since it was clear that some twenty-five members, contractors, etc., were simply waiting to be squared either by promise of contracts or money, and as I had no authority to bribe they simply abstained from voting and the Bill was thrown out. Twenty-five thousand pounds would have bought the lot, but I would rather somebody else had the job than myself. . . . I confess I was annoyed at my ill-success and had half a mind to split upon some dozen members who had been a little indiscreet in their proposals to me. As usual it was a Psalm-Singing Protestant Dissenter who, holding seven or eight votes in the palm of his hand, volunteered to do the greasing process for a consideration. Upon my word I do not think there was much to be said in favour of the Canadians over the Turks when contracts, places, free tickets on railways, or even cash was in question. (Glazebrook 1964, 1: 169)

Glazebrook states that 'few of the leading or minor politicians of the day were not mixed up with private railway or contracting companies, as well as with their official duties in directing railway construction as a public policy' (ibid., 1:165). In the case of the Grand Trunk, six out of the initial twelve Canadian directors were members of Cabinet (Easterbrook and Aitken 1956, 308). Naylor claims that:

despite incessant financial difficulties, or rather because of them, provincial and municipal aid continued to pour into the company as its Canadian board of directors, who simultaneously controlled the public purse that provided the subsidies, incessantly plundered the line. In time the line's financial weaknesses justified the voting of increasing sums of public money to save it. With each new crisis, the managers of the line would plead with the province for the means . . . to avert a calamity which will affect the interests of the several Shareholders and Bondholders as well as the whole province. (Naylor 1975, 1:26)

In 1860, the company's auditor stated of the company's precarious financial position: 'The present embarrassments of the company have arisen chiefly from its connection with the successive governments of the province and the necessity thereof of conciliatory political support' (ibid.).

Incentives to engage in rent-seeking activity were increased by the different levels of government with different regional or local interests to satisfy. This was particularly the case at the municipal level, where, throughout the latter part of the last century, interjurisdictional competition to induce railway companies to build branch lines on payment of suitable compensation was endemic. This competition for lines was part of a wider competition referred to by Naylor as the 'bonusing craze' (Naylor 1975, 2: ch. 13), where municipalities would go to extraordinary lengths to induce businesses to set up in a locality or to discourage them from leaving. Many of these business ventures were fanciful and sometimes fraudulent in their conception, yet municipalities, often encouraged by the policies of higher levels of government (for example, the Municipal Loan Fund Act adopted by the legislature of the Province of Canada in 1852), were induced to dissipate large amounts of their resources (often to the point of bankruptcy) by engaging in this fierce competition in locational incentives.

An attempt was made in 1888, through an amendment to the Ontario Municipal Act (that was adopted later by other provinces), to contain what was often a form of zero-sum game, with respect both to branch rail-line construction and to other business activities. In the light of the much more recent bailout phenomena canvassed later in this chapter, this attempt to constrain interjurisdictional competition in locational incentives is of interest. While apparently readily circumvented, its provisions were as follows:

- 1 Two-thirds of the rate-payers had to vote in favour of a bonus.
- 2 No bonus could be granted to a firm to establish itself in an industry in which firms had set up in the municipality without bonuses.
- 3 No bonus could be given to move a firm from one part of the province to another.
- 4 The maximum value of any bonus, principal and interest, could not exceed 10 per cent of the total municipal tax receipts. (Naylor 1975, 2:154-5)

Complications

The intimate relationship between the private and public sectors in railroad development and the government's technical and political difficulties in maintaining effective arm's-length control of the companies' activities led to other forms of opportunism in a number of cases: poor cost containment and large cost overruns relative to estimates; scrimping on agreed construction standards where these could not be readily or initially detected; repeated breaches, renegotiations, and relaxations of initial conditions of assistance; excessive dividend payouts to shareholders and correspondingly inadequate retention and reinvestment of earnings; and excessive remuneration of directors and other senior management. Currie notes that the Grand Trunk was managed with 'appalling inefficiency' for all but fifteen of its years of private operation (Currie 1957, 480). Its crowning act of cynicism was an attempt by the board to pay its own members and senior executive officers substantial severance sums on the eve of its nationalization (Currie 1957, 472; Hardin 1974, ch.4).

With respect to the Canadian Northern and the Grand Trunk-Grand Trunk Pacific lines, a number of factors inhibited completion and prejudiced prospects of profitable operation thereafter: a dramatic decline in the London bond market prior to the war and its closure during the war, resulting in scarcity and costliness of private sources of capital; shortages of cars and coal due to wartime procurement priorities; high levels of inflation, especially with respect to labour and fuel costs and precipitate increases in the prices of locomotives, freight cars, ties, and rails (prices that tripled from 1914 to 1917); declining load factors due to crop failure and the international recession that was in full force by 1913; a reduction between 1913 and 1915 from 400,000 to 36,000 immigrants a year; government reluctance to permit rate increases to reflect increased costs; inadequate terminal facilities and a large number of new and developing lines that were not yet economically viable; obligations to carry government supplies for wartime needs free as a condition of prior subsidies; excess capacity on the three transcontinental railways that had been constructed against an (excessively) optimistic scenario of burgeoning economic development; and serious mismanagement, at least in the cases of the Grand Trunk-Grand Trunk Pacific and two government-owned railways – the Intercolonial and the National Transcontinental (Brown and Cook 1976, 243 *et seq.*; Thompson 1978, 47-8).

Options

Given impending bankruptcy on the part of the Canadian Northern and the Grand Trunk-Grand Trunk Pacific during World War I, the government faced four basic choices: to encourage refinancing and reorganization, to encourage a merger with Canadian Pacific (CP); to do nothing and acquiesce in formal bankruptcy or receivership; or to take the companies over and run them as public enterprises.

The first option (reorganization) was unattractive to private financiers if it did not carry with it further substantial government guarantees, which, given the financial exigencies of the wartime economy, would have involved further government exposure that was likely to be politically unpopular. A merger with CP would also have been politically unpopular, particularly in the Prairies and the West, mostly because of fears of monopolistic exploitation. The third option, bankruptcy or receivership with liquidation of corporate assets, would have imposed substantial losses on shareholders (to the extent that their equity had any value) and to a much greater extent on creditors (including several provincial governments), users, and dependent communities who were at risk in the event of line closures. This, obviously, also would have been a politically unattractive option. In addition, it was said to pose risks to Canada's creditworthiness internationally and, in the case of the Canadian Northern, a significant risk to the future of the Canadian Bank of Commerce (one of the company's largest creditors). Indeed, in debates in the House of Commons on the proposed nationalization of the company, opposition members alleged that nationalization of the Canadian Northern in fact would be a bailout of the Bank of Commerce (Glazebrook 1964, 2:156). One member asked bluntly: 'Would not the object of the bill also be to save from bankruptcy the Canadian Bank of Commerce which is said to be responsible for all the Canadian Northern's liabilities since its very inception?' (ibid.). A run on the bank and perhaps the banking system generally thus seems to have been a significant factor in the government's assistance to CP in 1884 and 1885.

It was the fourth option – nationalization (involving the assumption of both assets and liabilities by an agency of the state) – that was finally adopted, albeit without great enthusiasm. This course of action was recommended in 1917 by the Drayton-Acworth Royal Commission on Transportation that was set up by the federal government to review the growing railroad crisis. The Commission found that the shareholders'

equity in both the Canadian Northern and the Grand Trunk-Grand Trunk Pacific had become valueless (although a board of arbitration subsequently awarded shareholders of Canadian Northern some \$10,800 million compensation upon nationalization, attracting allegations of favouritism towards the Canadian shareholders and undue sensitivity to the interests of the Bank of Commerce, which held security over many of the shares). In any event, the government of Canada already had become the residual risk-bearer and prime stakeholder in both companies.

The rise of Canadian National

The majority of the Drayton-Acworth Commissioners were sensitive to the new set of concerns that yet one more public enterprise would likely bring into its wake, particularly given the large deficits of the existing publicly owned lines that the government was already financing, and expressed serious misgivings about direct government ownership and operation. Instead, the Commission proposed a status for the new public enterprise (Canadian National) that was as independent as possible of the political process, involving a small, self-perpetuating board of five expert trustees subject to regulatory oversight by the Board of Railway Commissioners. The government agreed to maintain a separate legal status for the enterprise (making it a crown corporation) but insisted on its right to make appointments to a larger board of directors. Stevens writes of the new board:

Among the first directors was the Deputy Minister of Railways and Canals, a civil servant directly under the orders of his political chieftan. The others were chosen on a geographical basis, and as a consequence could be expected to espouse sectional rather than national interests. Some of the board members were superannuated political hacks, one being a thrice defeated member of Parliament who had obtained employment in a government department at a salary of \$2,500 per annum, where he had remained for twelve years with no increase before his elevation to the board of the Canadian National Railways. Another, a Quebec director, refused to interest himself in anything except the protection of the French language and jobs for his fellow provincials. (Stevens 1973, 314-15)

Mounting deficits of the Canadian National in the early years of the Depression and political hostility directed towards the company and its

President (Sir Henry Thorton) by the Bennett Conservative government which came to power in 1930 (aided and abetted by the President of Canadian Pacific) led to the appointment in 1931 of another Royal Commission on Transportation, this one chaired by Mr. Justice Duff of the Supreme Court of Canada (*ibid.*, ch.20). This Commission noted, *inter alia*, higher operating-cost ratios for CN compared to CP and stated:

Running through its administrative practices, however, has been the red thread of extravagance. The check upon undue expenditure, inherent in private corporations, because of their limited financial resources, has not been in evidence. Requisitions of the management have been endorsed by governments, and successive parliaments have voted money freely, if not lavishly. (Glazebrook 1964, 2:214)

It might be added that analysis of the relative efficiencies of CN and CP, at least in recent years, does not justify nearly so categoric a view (Caves and Christensen 1980).

Rejecting proposals for any form of amalgamation between the two major railroads out of concern for its anticompetitive effects, the Duff Commission instead recommended a smaller, more expert, more independent board of trustees for CN similar to what had been recommended by the Drayton-Acworth Commission. The Duff Commission noted that until then,

the directors' functions have been in practice nothing more than advisory. It would seem that they generally gave a formal approval to programmes of expenditures which they appeared to regard as the main concern of the president and the Government. This left the railway open to political influence and to public pressure exerted by communities and by associations of business and labour interests. (Glazebrook 1964, 2: 216-16)

The relationship of the proposed board of trustees to government was debated extensively in the House of Commons following the tabling of the Duff Report. MacKenzie King raised the question of whether the trustees' positions would be compatible with the retention of ministerial responsibility:

A ministry cannot divest itself of all responsibility. If government ownership and operation means that it cannot be carried out without the ministry divesting itself of all responsibility therefor, then we had better pass a resolution to that effect, and get rid of government ownership altogether. (Glazebrook 1964, 2:208-9)

While the system of trustees proposed by the Duff Commission was adopted, it lasted no longer than the tenure of the Conservative government. In 1936, the Minister of Railways in the Liberal government, C.D. Howe, introduced a bill abolishing the trustee system and replacing it with a board of directors of seven persons, claiming that the former was not representative enough and was 'responsible to no-one' (ibid., 2:217).

Summary

Thus, the first era of major public enterprise in Canada saw the emergence of debates about on the economic front, whether, there were effective incentives to manage efficiently facing management of public enterprise and, on the political front, about how the proclivity of politicians to interfere inordinately and improperly with management functions should be balanced against a concern for lack of public accountability by corporate management – 'the Scylla of political control and the Charybdis of an irresponsible executive', in Glazebrook's phrase (ibid., 2:219). These debates remain unresolved today and reappear in a number of recent public-enterprise interventions by government that will be discussed later in this study.

Two closing comments about the role of government in railroad development in Canada may be appropriate in the context of the present study. First, some economic historians are inclined to excuse the failings of both companies and government as relatively inconsequential, given their perception of the larger public good that was advanced by railroad development. This attitude is evident in Regehr's eulogizing of the 'western vision' that he attributes to the promoters of the Canadian Northern despite its ultimate insolvency (Regehr 1976) and in Currie's characterization of the Grand Trunk as 'a financial failure but a public asset . . . For nearly seventy years the Grand Trunk was the backbone . . . of Canadian transportation. A failure as a commercial enterprise, the Railway made a significant contribution to the economic development of Canada' (Currie 1957, 481). As Bliss remarks, 'very often historians

seem to succumb to the temptation to accept the given as the good' (Bliss 1982, 2). Recent economic analysis, confirming a long-standing economic hypothesis, finds empirically that national tariff policy in Canada in the last century probably reduced per capita income (Dales 1966) and that homesteading and railway-subsidy policies probably induced agricultural settlement and rail-line construction before it was socially optimal (Norrie 1968). Moreover, the gross overexpansion of the railway system during the wheat-boom years at the beginning of the century has been widely and convincingly criticized by many economic historians. Thus, the challenge suggested by the experience with the development of the railways is to develop and apply a more analytically rigorous framework of *a priori* evaluation to public involvement in major development projects than simple espousal of a notion that all forms of economic development are to be supported and preferably sooner rather than later.

Second, a countervailing bias held by other economic historians, of whom Naylor (1975) is perhaps the clearest example, is to view railway development as exemplifying the capture of the State by capitalist interests, or, in more neo-Marxist terms, the congruence of ruling-class interests ('elite accommodation') in the two sectors and their advancement through the exploitation of other economic and social classes. This view seems to imply, in the present context, a preference for public construction, ownership, and operation of the railways and similar larger-scale development projects (e.g., see Chodos 1973; Hardin 1974). This view, like the first, is uncritical in its failure to acknowledge the problems of competence and solvency faced by the railways that were publicly developed and operated – problems that were at least as, if not more, severe in nature than those that arose with the privately operated railways.

Historical experience does not support either uncritical acceptance of the performance of the private railways or easy endorsement of the alternative of public enterprise. A review of the full range of possible policy prescriptions for the government's role in economically nonviable enterprises is developed later in this study.

FINANCIAL INSTABILITY IN THE AGRICULTURAL SECTOR

*The failure of the wheat pools*¹

The development of the Prairie's wheat economy, especially in the first three decades of this century, made wheat Canada's principal export

staple and was the principal factor in the large population migrations to the Prairies and the economic development of this region of the country. Together with the growth of an industrial sector in central Canada (protected and encouraged by tariffs) and the construction of a transcontinental railway system, it laid the basis for the economic integration both geographically and sectorally that had been contemplated by the National Policy.

However, certain problems persistently attracted the concern of Prairie grain growers. One was the high cost of transportation. This problem fuelled opposition to any railway monopoly through the Prairies and supported the development and maintenance of competitive transcontinental-railway systems. It also created pressure for freight subsidies – in particular, for the commitments made by the Canadian Pacific Railway (CPR) on freight rates in the Crow's Nest Pass Agreement in 1897 in return for a capital grant.

Another cost-based concern was the monopoly power of local elevator operators. This led to a financially unsuccessful attempt by the government of Manitoba between 1909 and 1912 to acquire and operate, as a government enterprise, a network of local elevators in the province; to more successful efforts by farmer co-operatives to operate elevators in competition with the private elevator lines; and to the development of a system of terminal elevators by the government of Canada after 1912.

Further concerns revolved around the extreme price and income fluctuations that were associated with grain production. While climatic conditions, both here and abroad, obviously had much to do with these fluctuations, Western farmers were suspicious that manipulative behaviour by speculators, principally in dealings in futures contracts on the Winnipeg Grain Exchange, heavily exacerbated this instability.

In response to these concerns, producer groups in Alberta, Saskatchewan, and Manitoba set up private, producer-owned wheat pools in the early 1920s. These pools entered into voluntary five-year contracts with grain growers that provided for an initial payment for wheat delivered, based on a 15 per cent margin on the estimated average market price for wheat in a crop year, and interim and final payments on a *pro rata* basis, reflecting the return actually realized on the market from the disposition of the year's pooled supplies. The three provincial wheat pools marketed their wheat through a Central Selling Agency that set up marketing agencies in most major overseas markets. The pools initially contracted with elevator companies for the storage and movement of wheat, but

quickly developed their own elevator networks as well as integrated handling and marketing functions.

'Orderly marketing' was the declared rationale of the pools. While 'by no means free from ambiguity, and in fact subject to serious misconception' (Fowke 1957, 216) the expression seems to have encompassed several objectives. First, by setting up a system of direct buying and selling, the pools sought to reduce or eliminate the handling charges of various middlemen. Second, and closely related to the first objective, was the intent to reduce or eliminate the gains from private speculation in futures markets and alleged instabilities and volatilities associated with such speculative activities. Third, by metering the flow of wheat onto world markets, it was thought that the traditional autumn glut of wheat and consequent seasonal depression of prices could be avoided. Fourth, and much more controversially, more radical proponents of the pools felt (probably fallaciously) that a central selling agency would have an ability to exert an influence on world grain prices and thus assure to farmers a 'fair' price for their grain, one that competitive markets were felt to be incapable of providing.

A background issue that promoted the development of the wheat pools was the persistent demands by producer interests that the federal government reconstitute the Wheat Board that had acted as a mandatory buying agent for grain during World War I, and that had been disbanded at the end of the war. Many producers believed that the depressed prices for grain that obtained in the immediate postwar period were, at least in part, attributable to the disbanding of this Board. However, serious constitutional doubts as to the federal government's ability to regulate the grain trade in this fashion in peacetime, as well as opposition from private traders and some producer interests, had discouraged any initiatives to re-establish the Board.

Eventually, the demands for a mandatory central buying and selling agency shifted to demands on provincial governments to render pooling with the co-operatively owned wheat pools mandatory. As initially conceived, the pooling schemes were voluntary, and open-market trading continued in parallel with them. However, the pools had begun to attract strong support from wheat producers. Starting at 37 per cent for the 1924/5 crop year, deliveries to the Central Selling Agency ranged from 51 to 53 per cent of total Western deliveries over the next five years. By 1928/9, the provincial pools had approximately 140,000 members under contract. These represented approximately one-half of the total number

of farmers in the Prairie provinces (Fowke 1957). The demands for legislated '100 per cent pooling' emerged most strongly in Saskatchewan between 1927 and 1931. They culminated in provincial legislation that reflected this goal. However, the courts held this legislation to be *ultra vires* the provincial legislature.

Rationales for government intervention

The wheat pools appear to have operated with some success through the middle and later 1920s, at least in terms of reducing price uncertainties faced by farmers. However, prices for the 1929/30 crop year crashed with the onset of the Depression and fell even further during the early months of the 1930/1 crop year. The pools discovered that they had paid out to farmers prices well in excess of what could be realized on world markets (with the overpayment for the 1929/30 crop being in excess of \$22 million). The margin had to be financed by advances from seven banks. With the collapse of the pools imminent, they sought and secured the agreement of their respective provincial governments to guarantee losses on their advances for the 1929/30 crop year; subsequently, the federal government was prevailed upon to guarantee bank advances for the 1930/1 crop year. In return, the pools agreed that the Central Selling Agency would be taken over and managed by someone acceptable both to the banks and the government. Contract pooling was abandoned in June 1931 through the termination of the delivery contracts of pool members. The Central Selling Agency then proceeded with an orderly liquidation of carried-over inventory and was given authority to buy new wheat or wheat futures under federal-government guarantee to provide some degree of price support to the current market.

In explaining the federal government's intervention, Fowke remarks:

The government acted initially to avert the catastrophe which would inevitably accompany the dumping of the pools' holdings of wheat from the crops of 1928, 1929 and 1930 on a market which was already seriously demoralized. There was no way of foretelling all the results which would follow an unbridled sale of Canadian wheat stocks. It would certainly ensure the collapse of the pools as pooling agencies, but that was of little concern except to their officials and members. The more significant possibility in the imminent collapse of the wheat pools was that the closely knit banking and financial structure of the Dominion might be

imperilled. This risk, whether regarded as substantial or slight, was one to be avoided at any cost. (Fowke 1957, 235)

The wheat pools largely retreated to their role as elevator operators after the termination of their contract-pooling activities and in 1935 the Canadian government set up the Canadian Wheat Board (a crown corporation) to operate as a voluntary buying and selling agent in parallel with private traders. In 1943, it became a mandatory agent, in large part because of the exigencies of wartime trading dislocation and procurement needs. However, with variations, the Board has remained the sole marketing agency for most types of Prairie-produced wheat to the present day. Its marketing functions have from time to time been buttressed by often controversial production quotas and acreage restrictions in furtherance of its stabilization functions in the postwar period.

Farmer insolvencies in the Great Depression

The federal and provincial governments sponsored a large number of relief measures in an attempt to save the farm population from destitution during the Great Depression. These measures included direct subsidies, minimum-price arrangements, stabilization policies, and debt adjustment. This last strategy is of importance to this study because it has figured in current debates over strategies for dealing with failing enterprises.

Apart from special wartime measures, government intervention in the adjustment of farm indebtedness appeared first in Alberta and Saskatchewan in the early 1920s. During the 1930s, most provinces enacted debt adjustment legislation, which in the Prairies focused particularly on farm indebtedness. There, Debt Adjustment Boards were empowered to seek voluntary compositions between debtors and creditors (including secured creditors). Failing these, the Boards could issue certificates that suspended creditors' enforcement remedies for default for prescribed periods of time (Easterbrook 1938, ch.9).

Under the federal Farmers' Creditors Arrangement Act of 1934, a summary procedure applicable throughout the country was provided whereby farmers could make voluntary arrangements with their creditors (including secured creditors and mortgagees). If such arrangements were not agreed on, farmers could appeal to local Boards of Review (which consisted of a judge and representatives of both creditors and

farmers) that were invested with wide powers relating to the adjustment of debts.

Easterbrook notes:

As of February 14, 1938, approximately 31,700 proposals had been submitted under the Act, and 26,365 disposed of either at meetings of creditors or by proposals formulated by Boards of Review. The amount of indebtedness in cases disposed of amounted to \$158,311,366, the reduction to \$50,189,511 of principal and \$4,211,096 of interest . . . [As of September 1936], a debt reduction of \$33,723,588 had been effected at that time, the original indebtedness amounting to \$107,496,907; the estimated saving in interest is \$2,795,868. Secured debts were written down by almost 30 per cent and unsecured debts by approximately 45 per cent. (Easterbrook 1938, 150)

The Study Committee on Bankruptcy and Insolvency Legislation described the mechanics and impact of the legislation thus:

Where the farmer and his creditors cannot agree upon the terms of an arrangement, the court is empowered to formulate an arrangement and impose it upon the creditors. In such cases, the secured debt of a farmer can be reduced without the consent of the creditor. Although the Act, which is far reaching and drastic, had the immediate result of helping the hard pressed prairie farmers, there is reason to believe that in the long run the Act worked to the detriment of the farmer. Investors became reluctant to lend money on farm mortgages by fear that a part of the loan might be wiped out through an arrangement under the Act. The long term result of the Act was that almost the only money loaned on farm mortgages came from the Farm Loans Board, created at the time the *Farmers' Creditors Arrangement Act* was enacted . . . The *Farmers' Creditors Arrangement Act*, as a practical matter, cannot now be used as it relates only to farmers who have incurred two-thirds of the total amount of their debts before December 15, 1943. No proceedings under this Act have been reported since 1959. (Canada 1970, 23-4)

What is particularly interesting about this legislation is that the relief envisaged for insolvent farmers did not, at least initially, involve direct state assistance. Rather, the cost of relief was borne by the creditors.

This led to the State becoming a lender of first resort with respect to farmers covered by the legislation.

During the recent recession, proposals were mooted to reintroduce similar legislation in the agricultural sector and, more generally, to provide for corporate-reorganization procedures (whatever the business sector). The implications of such proposals as a response to the bailout phenomenon are evaluated later in this study.

THE POST WORLD WAR II ERA TO THE MID-1970s

Background influences

A number of changes in emphasis of Canadian economic policy in the post World War II era seem to have created an environment that is even more open to economic intervention by both the federal and provincial governments than the one of earlier decades (Bliss 1982; Smiley 1980b). Six influences on these changes are discussed below.

First, the devastating experience of the Depression had brought home to Canadians, especially Westerners, the vulnerability of a staples economy (with one staple, wheat, playing a dominant role) to the vagaries and volatility of international commodity markets. Hence, a strong public perception developed of the need to diversify Canada's economic base to insulate it somewhat from external shocks. Changing technology in the agricultural sector and consequent sharp and continuing contraction in employment in this sector further underscored the need to develop a more diversified economic base.

Second, the Depression also demonstrated the futility of economic autarky as a dominant characteristic of the international economic order. In the immediate postwar years, Canada and many of the other industrialized nations of the world hence committed themselves to the reduction in international tariff barriers reflected in the 1947 General Agreement on Tariffs and Trade (GATT). This agreement led to the increasing erosion of a major cornerstone of the National Policy – the promotion of a Canadian industrial sector. However, protectionist interests in many cases simply redirected their attention to substitute forms of intervention.

Third, the influence of Keynesian economics in the immediate prewar and postwar years provided a new rationale for government activism in economic policy-making, at least at the level of general monetary and

fiscal policies, and defined a new stabilization role for government in promoting countercyclical policies.

Fourth, the government, perhaps dating from the introduction of unemployment insurance in 1941, became increasingly committed to a range of social policies that we now associate with the modern welfare state. This commitment was related, in part, to the need to fashion adjustment-assistance strategies in the wake of changes in international trade patterns and policies and to the stabilization role implied for government by Keynesian economics.

Fifth, recurrent bouts of economic nationalism in the postwar period produced an ambivalence towards the desirability of foreign investment and ownership and, in some contexts, created pressures on government to support firms or sectors whose viability or prospects would otherwise have been contingent on the involvement of foreign investors.

Sixth, a number of factors seem to have induced a strong emphasis on province-building, regional development, and decentralization of government functions during the 1950s, 1960s, and early 1970s. There was a growing realization that neither tariff policy in the prewar years nor Keynesianism in the postwar years was particularly sensitive to regional inequalities in wealth (and in the case of tariff policy, that it may have exacerbated them). From the time of the Rowell-Sirois Commission in the early 1940s, there was also a strong thrust towards increased fiscal autonomy on the part of the provinces. This was due to enhanced taxing capabilities and new federal-provincial transfer (equalization) arrangements as well as the provinces' enlarged capacity to exploit natural resources and resource-based enterprises in sectors such as mining, energy, forest products, and fishing. In addition, the Quebec 'quiet revolution' prompted the federal government to decentralize somewhat to allow Quebec more control over its own internal affairs.

Of these various influences on the government's postwar economic policies, the one that seems to carry the greatest explanatory power with respect to firm-specific government assistance, particularly of a bailout type, is the emphasis on province-building and regional development that began in the 1950s. In most cases, the desire to develop regions or provinces was translated into programs to maintain or create jobs for a depressed region or dependent community. In this context, both federal and provincial policies were influenced.

The growth in government financial assistance to the private sector

Another offshoot of the influences on economic policy outlined above has been an enormous growth in programs of government financial assistance to the private sector over the past thirty years. Such programs now number in the hundreds at the federal and provincial levels and embrace yet further sources of assistance at the municipal level (Johnson 1982; Doherty and Fanthan 1983; Trebilcock et al. 1983). The growth in government assistance (federal and provincial) to the private sector from 1930 onwards is shown in Table 3.

In terms of the sectoral breakdown of this assistance, the percentage share provided to the business sector has declined dramatically from 80 per cent in 1930 to 13 per cent in 1980, while that for housing has jumped from 1 per cent to 60 per cent (Economic Council of Canada 1982, 6).

As of March 1981, there were twenty-eight agencies, boards, and department divisions at the federal and provincial levels whose primary activity was to provide business loans, investments, and loan guarantees (Economic Council of Canada 1982, 18-19). As of March 1980, total government loans and investments outstanding amounted to \$6 billion and guarantees to \$577 million in the business sector.

The Economic Council of Canada (*ibid.*) states that almost all assistance to business was provided through programs, with *ad hoc* intervention to deal with specific cases (e.g., bailouts) representing less than 7 per cent of total assistance. However, this statement is misleading because many of the major business assistance programs (e.g., the federal Enterprise Development Program, the Regional Development Incentives Program, and provincial agencies, such as the Ontario Development Corporation) in fact themselves provide assistance on an *ad hoc*, firm-specific, discretionary basis against very open-textured criteria. Indeed, a number of the recent bailouts reviewed later in this study were effectuated under the aegis of established federal or provincial programs or agencies, such as the federal Enterprise Development Program or the Ontario Development Corporation.

With respect to direct grants to private sector industrial businesses, Binhammer et al. (1983, 46) estimate that in the fiscal year 1978/9, federal and provincial assistance was of the order of \$304 million, broken down as follows:

TABLE 3

Government assistance to the private sector through financial instruments, Canada, selected years, 1930-80

	Loans and investments	Loan guarantees and credit insurance	Total	Total as a proportion of GNP
1930	232	576	807	13.2
1939	392	420	820	15.6
1950	575	142	717	4.3
1960	2,058	2,276	4,334	11.8
1970	6,717	5,631	12,348	15.5
1980	19,065	29,365	48,430	18.5

NOTE: This table does not include: direct cash grants, tax expenditures, tariff protection, or regulatory forms of support (e.g., restrictions on entry or on price competition).

SOURCE: Economic Council of Canada (1982), 3

Federal government

Major grant programs	\$228.410 (million)
Share of GDAs	<u>11.746</u>
	240.156

Provincial governments

Major programs	\$57.600 (million)
Share of GDAs	<u>6.206</u>
	<u>63.806</u>

TOTAL	\$303.962 (million)
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Binhammer et al. summarize the immediate or ostensible policy objectives of federal-government assistance to the private-business sector as follows:

- To stimulate industrial research, innovation, product development, and productivity improvement
- To assist private-sector firms in adjusting to changing market conditions
- To develop and expand export markets
- To stimulate regional industrial growth

- To develop key sectors of the economy
- To remove undesirable externalities.

The general picture that emerges from the available statistics is of some growth in government assistance through grants to private-sector industrial businesses over the 1970s (the statistics show an average increase in federal grants of 5.5 per cent per annum, with smaller increases in the latter half of the 1970s); an average annual rate of increase in federal loans and investments to the private sector of 9.7 per cent between 1970 and 1980; an average rate of increase in federal loan guarantees over this period of 18.1 per cent – a rate that was considerably in excess of the general rate of growth of federal expenditures in the same period (Maslove 1983); and a heavily predominant federal government role (compared to the provincial governments') with respect to all of these forms of assistance. The federal government was responsible for 79 per cent of the grants (1978/9); 74 per cent of loans and investments (1980); and 95 per cent of loan guarantees and credit insurance (1980).

As of March 1980, federal and provincial loans and investments amounted to almost \$6 billion and guarantees to \$577 million while \$304 million was allocated in the form of grants to the business sector. These figures highlight the heavy reliance by government on loans, investments, and guarantees relative to grants. Further, while most grants, loans, and guarantees have been relatively small in size, in the case of a number of programs, including the Enterprise Development Program, larger allocations of assistance and larger corporate recipients seem to have accounted for a high percentage of expenditures.

Firm-specific subsidies: some prominent examples of employment creation and regional development

The postwar demands for employment creation (or maintenance) and regional development reviewed above are reflected in a number of prominent cases of firm-specific subsidies by government.

At the federal level, the bailout of the Cape Breton coal mines (in Nova Scotia) through the creation in 1967 of a federal crown corporation, the Cape Breton Development Corporation (DEVCO), which took over the coal-mining operations of the Dominion Steel and Coal Company (DOSCO) is perhaps the best-known example (Gordon 1981, 160ff; Tupper 1978; Sexty 1981, 13). At the time of the takeover, the company employed

about 7,000 people, or 14 per cent of the Cape Breton labour force. The region already faced high levels of unemployment, and the closure of the mines would have imposed severe economic and social costs on it. The coal industry in Cape Breton had received vast subsidies from the federal government over many years (about \$200 million between 1928 and 1965). The government's longstanding political commitment to the region precluded total abandonment of the DOSCO mines when their continued operation was threatened. Instead, DEVCO was given a mandate to pursue a program of phased contraction and diversification. Government grants have continued since the takeover (about \$400 million between 1967 and 1978) and substantial operating losses have been reported in most years of the company's operations. The history of DEVCO is the subject of a case study later in this volume.

Apart from this example of a major, regionally targeted federal bailout, many smaller-scale cases have been dealt with under federal programs such as those administered by the (former) Department of Regional and Economic Expansion and under the Enterprise Development Program within the (former) Department of Industry, Trade and Commerce.

At the provincial level (moving from east to west), a number of government bailouts of failing ventures in the 1960s to mid-1970s bear citing (although the following catalogue is by no means exhaustive). The cases cited can be grouped into two general categories. One category includes cases where government was induced to intervene and rescue a failing private-sector firm that previously had enjoyed an unassisted market existence (our strict definition of a bailout). The second includes cases where, as for the canal and railway companies of previous eras, the government, although committed to assisting a private-sector firm from the outset, ended up as the major shareholder (and often the formal owner), typically following unavailing efforts to maintain the private-sector firm through the commitment of public resources well in excess of the level originally contemplated by government. In this sense, this category includes business promotions that often became business bailouts. Such promotions can be viewed as an aspect of the 'forced growth' phenomenon, to use Mathias's (1981) apt phrase, or of 'forcing the pace', to use Bliss's (1982) equally apt phrase. These two strategies can be viewed jointly as attempts at saving losers and picking winners, although the distinction in practice is often a fine one.

Bailouts in Newfoundland

In 1968, the province of Newfoundland and Canadian Javelin Ltd. entered into an agreement to construct a liner-board mill (under the aegis of Labrador Linerboard Ltd.) with operations at Stephenville and Goose Bay (Sexty 1981). The province agreed to guarantee the debt associated with the project against the security of a first mortgage on the company's assets. Costs of the project escalated dramatically from the initial estimate of \$53 million, and in 1972 the province passed legislation creating a crown corporation to take over and complete the project (at an eventual cost of \$155.4 million). The company began operations in 1974 but ran up operating losses of \$31.5 million in 1975, \$31.5 million in 1976, \$52.4 million in 1977, and \$27.1 million in 1978. By March 1978, the province had extended over \$300 million to the company in loans or guarantees. Operations were terminated in August 1977 and in November 1978, the government agreed to sell the plant to Abitibi Price Company Ltd for \$43.5 million for conversion to newsprint production (a purchase that was supported by the former Department of Regional and Economic Expansion through a grant of \$15 million to reactivate the project). The restructured operations are estimated to have provided about 900 jobs. The principal promoter (John Doyle) of Canadian Javelin faces criminal charges in the event of his return to Canada.

In 1970, the government of Newfoundland arranged \$155 million in loans and guarantees for the Newfoundland Refining Company for the construction of a 100,000 barrel per day oil refinery at Come By Chance Bay. The refinery was expected to be the foundation of a large petrochemical complex that would ultimately employ 30,000 people (*Globe and Mail* 1970a, b, 1971). For a fifteen-year startup period, the Newfoundland Refining Company was to be owned and operated by three provincial crown corporations. At the end of the fifteen years, loans were expected to be fully repaid through profitable operations of the refinery, and John M. Shaheen National Resources Co. NY was expected to exercise his option to buy the plant in exchange for \$10 million in equity and for managing the operation during the startup period. Shaheen's interests were given take-or-pay contracts on 60 per cent of production (*Globe and Mail* 1973).

When finally completed in October 1973, a year behind schedule, actual construction costs were reported to be \$215 million. During the construction period, ownership changed hands and financial arrange-

ments were amended. Shaheen had acquired all of the existing equity of \$10 million held by the crown corporations, injected another \$40 million, and refinanced the company by promoting plans (which never materialized) to build a second refinery with a capacity of 300,000 barrels per day adjacent to the first one. Construction costs for the additional facility were estimated at \$308 million. The new project was to be owned and operated by the wholly owned Shaheen subsidiary, the Newfoundland and Labrador Edison Company (NALESCO). The Newfoundland government provided a further \$78.5 million second-mortgage loan. As a result of these transactions, the financial commitment of the province was reduced from more than \$150 million to \$108.5 million (McIntyre 1976).

The refinery had technical problems and never operated at more than 60 per cent of its rated capacity. By February 1976, it was incurring operating losses of more than \$10 million per month. Actions of a major Japanese unsecured creditor, owed over \$300 million, precipitated the closing of the refinery in February 1976. The Newfoundland Supreme Court ruled the refinery bankrupt in March 1976. With debts in excess of \$600 million (only about one-third of which were secured) and \$400 million in assets, this was the largest bankruptcy in Canadian history (Harrington 1976; *Globe and Mail* 1976).

Five years of negotiations followed, with Shaheen attempting to regain control and appealing the bankruptcy order. During this period, outstanding debts denominated mainly in US dollars and British pounds increased as the Canadian dollar depreciated and more than \$25 million in maintenance costs were incurred by the first-mortgage holder. In the fall of 1979, it was announced that the plant would be sold for its \$17 million of scrap value if no buyer came forward by March 1980 (Caruthers 1980; Watkins 1978).

On 29 March 1980, Petro-Canada (a federal crown corporation) negotiated an option to buy that was exercised in December 1980. The purchase price, excluding repair and startup costs, was \$237 million. Of this amount, \$10 million was to be paid to the receiver upon closing, with a further \$7 million to be paid on startup, expected to take place at the end of 1982. The remaining \$220 million was to be repaid with operating profits over twenty-five years. The Newfoundland government would receive no cash. It accepted a 10 per cent equity interest (Waddell 1980).

Maintenance costs of \$1.5 million per year, poor location, poor market conditions, and the high cost of repairs led to the announcement in

February 1984 that Petro-Canada would not reopen the plant. It will be dismantled if no buyer is found.

Bailouts in Prince Edward Island

In Prince Edward Island, the largest attempted bailout of a failing private-sector venture during the 1960s and early 1970s was Gulf Garden Foods Ltd. (and an associated company, Bathurst Marine Ltd.), a frozen-fish processing and shipbuilding venture promoted by Jens Moe, a Norwegian entrepreneur resident in Montreal and of obscure background (Mathias 1981, ch. 2). The construction of the fish-processing plant, begun in 1963 at an estimated cost of less than \$1 million, was to be partly financed by the PEI government through grants and loans. The eventual cost of construction was almost \$2.5 million and both the fish-processing plant and shipyard during their short period of operations ran up large deficits, mostly also financed by the provincial government. When the two companies became bankrupt in 1967, the government had paid out \$9.3 million and the value of the companies' assets in bankruptcy was estimated at \$3.1 million. The fish-processing plant was eventually sold to the H.B. Nickerson and Son Ltd. fish processors of Nova Scotia for an undisclosed amount. A commission of inquiry into the project found the companies' accounts in a state of impenetrable confusion, with monies moving into and out of a network of companies owned or controlled by Moe for reasons that were never documented. The commission also found that the government had not taken adequate steps to evaluate Moe's background or competence for the project or taken adequate care to evaluate the economic viability of the project itself.

Bailouts in Nova Scotia

In Nova Scotia, three examples of the bailout phenomenon stand out. In October 1967, the Nova Scotia government took over the Sydney Steel plant (SYSCO) owned by Dominion Steel and Coal Company (DOSCO) and employing about 3,200 people (Sexty 1981). DOSCO had announced the closure of the plant, following heavy operating losses in previous years. Since the takeover, federal-government grants as of 1981 amounted to about \$105 million and provincial grants to \$138 million. The plant had debts of about \$300 million. In 1979, estimates of the capital required to make the plant economically viable ranged as high as \$300 million to \$500 million to write off accumulated debt and \$200 million for plant rehabilitation.

In terms of new development projects in Nova Scotia, the largest financial failures have been Deuterium of Canada Ltd. and Clairtone Sound Corporation. Late in 1963, Deuterium and the government of Nova Scotia entered into an agreement on the construction of a heavy-water plant at Glace Bay, Cape Breton. The heavy water was to be supplied to Atomic Energy of Canada Ltd. for use in nuclear reactors (Gordon 1981; Mathias 1981, ch. 5). Deuterium was promoted by one Jerome Spevack, a well-known nuclear scientist who had developed special processes for the production of heavy water but who had little management expertise. The initial cost of the plant was estimated at \$30 million, with \$12 million to be lent by Industrial Estates Ltd. (IEL), the development arm of the Nova Scotia government. Severe technical difficulties and consequent delays were encountered in the construction of the plant and as costs skyrocketed, the province poured \$140 million into the project to keep it alive. In 1966, the government, through IEL, bought out the privately held shares in Deuterium. By 1969, it had spent over \$200 million on rehabilitation. In 1978, AECL purchased the plant from the Nova Scotia government for \$66 million, at which time it had begun to produce heavy water at significant levels – although still well below the plant's projected capacity. About 300 people are employed in the plant at a cost of about \$140,000 per person-year.

Clairtone was formed in Toronto in 1958 by two young entrepreneurs, David Gilmour and Peter Munk, to manufacture and market high-priced, top-of-the-line stereo sets (Gordon 1981, ch. 4; Hopkins 1978). In 1964, IEL, through the purchase of \$7 million of bonds and \$1 million of shares in Canadian Motor Industries (which Clairtone controlled and which was to assemble Japanese cars in Canada), induced Clairtone to locate in Pictou County, Nova Scotia. The company immediately extended its activities into the manufacture of colour TV sets. The expansion plans of the company were ambitious, but labour and productivity problems and a depressed colour-television market resulted in mounting operating losses. The government, again through IEL, was induced to provide continuing assistance through loans and guarantees to prevent foreclosure by creditors (and allegedly potential damage to the province's credit rating), and to save the 400 to 500 jobs created by the company in Pictou County. IEL took over the company in 1967. After recurring deficits, the company was wound up in 1972, by which time IEL had invested \$20 million in Clairtone, all of which was lost.

Gordon (1981) writes of IEL:

The whole approach was geared to promotion at any cost. IEL's control section, which was responsible for project evaluation, was small and relegated to a secondary role. Few independent studies were undertaken. 'We only pretended to be operating Industrial Estates on a business basis,' said Sobey [the President of IEL], 'leaning over backwards to take undue risks when we saw opportunities of creating employment in Nova Scotia.' (134)

Bailouts in New Brunswick

In New Brunswick, the largest-scale attempted bailout by the provincial government of a new development venture in the period being reviewed was Bricklin Canada Ltd., a company promoted by a young, flamboyant American entrepreneur with a limited business background who had developed an idea for manufacturing and marketing a light, compact sports car with a fibreglass body and gull-wing doors (Gordon 1981, ch. 4; Fredericks 1977). In June 1973, an agreement was entered into between Bricklin and the government of New Brunswick for the setting up of auto plants in Saint John and Minto, New Brunswick. Malcolm Bricklin projected that he would sell 10,000 cars in the company's first year of operation and 32,000 in the fifth year, with cars retailing at \$3,000. The government guaranteed loans of \$3 million and purchased a 51 per cent interest in the company for \$500,000. The initial estimate of the cost of the plant was \$9 million. By the time the company went into receivership in September 1979, the province had invested \$23 million in the venture in a futile attempt to save it. Only 2,880 cars had been manufactured. Costs of construction and the retail price of the cars (\$10,000) escalated dramatically in the face of serious design, quality-control, productivity, and personal-relations problems, and a chaotic and nepotistic management style.

According to Gordon (1981), Premier Hatfield's decision to finance the venture was based on reports that took only three weeks to prepare and that contained production projections and investment figures provided solely by Malcolm Bricklin. By-elections in 1973 and the general provincial election in November 1974 provided settings in which the Premier and his Conservative Party had strongly committed themselves to the project politically. This made it difficult to resist continuing demands for assistance. Following receivership, the provincial government took over shares in the company but was unable to interest any

buyer in taking over the operation as a going concern. All assets were in due course liquidated.

Bailouts in Quebec

Quebec's Sidbec, the provincially owned mining, processing, and steel-manufacturing complex, began life through its acquisition of the shares of Dominion Steel and Coal Corporation, a company that had incurred losses on the plant. Since its creation it has depended on substantial provincial subsidies (Gordon 1981, 144).

Another Quebec case of some interest is Tembec Forest Products Ltd., a sulphite paper mill in Temescaming, 350 miles northeast of Montreal (Bradley and Gelb 1983, 108ff). The company had operated in the town since 1919 and was its major employer, being responsible for 400 jobs (in 1972) and several hundred more in associated lumbering operations. In 1972, Canadian International Paper (CIP), the owner of the mill, announced its intention to close Tembec, citing as problems excess pulp capacity, low productivity, costly environmental regulations, and tariff cuts between the United States and Canada that made American-produced pulp more competitive. The mill and surrounding lumber concessions were purchased from CIP. The mill reopened after lengthy negotiations involving a new management group, the Quebec and federal governments, CIP, commercial banks, the local community, and the mill workers. The Quebec government provided \$13.5 million in loans, grants, and preferred shares, and the federal government \$10.4 million in grants and loan guarantees. The management team contributed \$100,000. The workers contributed \$400,000 (\$1,000 per person) in addition to making concessions in wages and fringe benefits. The management group held 35 per cent of the equity, the workers 31 per cent, a federal crown corporation 10 per cent, and the banks and the local population 20 per cent. Since the takeover, the company has cut costs and improved productivity substantially and has apparently been restored to profitability. Tembec is apparently the first major Canadian case of a worker buyout of a failing firm, although in recent years there have been a number of other examples: e.g., Tricofil (Quebec), a textile company subsequently liquidated; Pioneer Chain Saws (Ontario), subsequently sold to Swedish interests; National Hardware (Ontario); and Northern Breweries, also in Ontario (*Globe and Mail* 1983c).

Bailouts in Ontario

In Ontario, probably the most costly bailout of a failing firm in the period under review is Minaki Lodge Ltd. (the subject of a case study later in this volume). Minaki Lodge was purchased in 1974 by the Ontario government, through the Ontario Development Corporation. The private owner had decided to close down operations (Gordon 1981, 151). Loans of \$550,000 had previously been made by the government to the owner. The lodge is located in the township of Minaki (300 people), 40 kilometers north of Kenora (a riding held by Leo Bernier, formerly Minister of Northern Affairs) in northwest Ontario. In July 1983, the lodge was finally officially reopened, following government expenditures of \$48 million on improvements to the 120-room lodge, airstrip, and road linkages, and on related costs. (This amount was three times the initial estimate of the cost of rehabilitation.) Former Premier William Davis, in reopening the lodge, stated: 'It's a very good investment and demonstrates our confidence in Northwestern Ontario' (*Toronto Star* 1983). A local promoter of the reopening of the lodge said that as a result of the reopening, 'every single person in this community who wants a job can get it'. However, a hotel employee said that as far as he knew, there were only about fifteen Minaki residents employed at the resort, with the rest of the employees being mainly university students engaged in summer employment (*Globe and Mail* 1983a, 4).

Bailouts in Manitoba

In Manitoba, the Shreyer NDP government took over several local failing private-sector companies in the early 1970s: Saunders Aircraft Ltd. (a small aircraft manufacturer), which shortly afterwards was placed in receivership; Flyer Industries (a bus manufacturer); Venture Manitoba Tours Ltd. (a cruise-ship venture); and McKenzie Seeds Ltd., a Brandon-based seed producer and distributor (Sexty 1981). However, all of these bailouts were relatively small-scale and were dwarfed by a previous Manitoba government's commitment of funds to a large timber and forest products complex in northern Manitoba, Churchill Forest Industries Ltd., promoted by a shadowy group of Swiss, German, and Italian entrepreneurs who were never fully identified (Gordon 1981, ch.4; Mathias 1981, ch.6). The project was announced in March 1966 by Premier Duff Roblin's Progressive Conservative government three months before a provincial election. Alternative proposals for projects by

several substantial forestry companies in northern Manitoba were rejected, apparently in part because of their more modest scale and projected delays in negotiating terms and conducting feasibility studies. The project was estimated to cost \$100 million although total costs in bringing it to completion may have been almost twice that figure. In January 1971, the government placed Churchill Forest Industries into receivership, following defaults in meeting interest obligations to the Manitoba Development Corporation (the government's development arm). By this time, the provincial government had spent \$92 million (principally in loans to the company) and the federal government had been committed to further subsidies of about \$15 million. The complex was subsequently taken over by a Manitoba crown corporation, Manitoba Forestry Ltd., which has operated with substantial losses and required a continuing stream of additional government subsidies.

A Manitoba Royal Commission investigating the project found that the Churchill Forest complex should have cost \$85 million rather than the \$145 million expended up to the time of receivership. Technical inefficiencies, delays, co-ordination problems, weak to nonexistent supervision by the officers of the Manitoba Development Fund (later Corporation) in the disbursement of funds, excessive fees paid to private-sector principals, and chaotic accounting systems that made it impossible to follow funds through the maze of companies controlled by the European promoters, all attracted criticism. Only about 1,400 jobs were created as a result of the investment of well over \$100 million in public money in the initial construction of the complex (and continuing subsidies thereafter).

Bailouts in Saskatchewan

In Saskatchewan, the Interprovincial Pipe and Steel Corporation Ltd. (IPSCO) was the product of efforts by the NDP government of Premier T.C. Douglas to diversify the economic base of the province (Gordon 1981, 143-4). The government had offered loans and loan guarantees as well as long-term contracts to two private-sector companies involved in aspects of the manufacture of pipes (initially needed for the province's natural-gas system). It was these two companies that subsequently merged as IPSCO. During its early phase, IPSCO experienced substantial financial difficulties that necessitated further loan guarantees from the Saskatchewan government. In later years, in lieu of interest payments on these

debts, the government took shares in the company and acquired further holdings on the open market. Both the Alberta and British governments, through corporate intermediaries, also acquired shareholdings. Each government directly or indirectly holds 20.2 per cent of the stock of IPSCO, the balance being publicly traded.

Bailouts in British Columbia

In British Columbia, the history of government bailouts of failing private-sector firms dates back to the takeover in 1918 of the partially completed Pacific Great Western Railway (later renamed the British Columbia Railway Company), whose bonds the provincial government had guaranteed at the time of the railway's incorporation in 1912 but which the promoters were incapable of honouring. The company has since been operated as a crown corporation of the province of British Columbia, and has required substantial continuing subsidies of public funds to sustain the operations. Its continued support has been justified in terms of its role in fostering development in the north of the province (Gordon 1981, ch.4; Swainson 1981).

Beginning early in the 1960s, the Bennett Social Credit administration took over a number of heavily subsidized private-sector ferry operations. They are now operated through the BC Ferry Corporation (Swainson 1981). In the early 1970s, the Barrett NDP administration acquired interests in a large number of private-sector companies. Two warrant special mention as clear examples of the bailout phenomenon. The pulp and paper mill at Ocean Falls, BC (325 miles north of Vancouver) was purchased by the BC government in 1973 for \$789,952 from Crown Zellenback Canada Ltd. following an announcement of pending closure of the mill (Sexty 1981). The mill, the major employer in the town, had to be modernized and conform to costly environmental requirements at a time when markets for pulp and paper were depressed. The mill has since been operated as a crown corporation (Ocean Falls Corporation). The government has invested heavily in improvements to the mill (e.g., \$7 million in 1976), although substantial operating losses continue to be incurred (\$8 million in 1979, and \$16 million in 1980).

In June 1973, the BC government took over Columbia Cellulose Ltd., a subsidiary of Cellanese Corporation of America (Sexty 1981; Gordon 1981, ch.5). The company operated a sulphite and bleached kraft-pulp mill and a sawmill at Castlegar and a sawmill at Terrace. The parent

company had lost about \$120 million over the years in these operations, and was considering closing its sulphite mill in Prince Rupert, where it was a major employer. The government acquired an 80 per cent interest in the subsidiary that was held first through a new company, Canadian Cellulose Company Ltd., and later through the British Columbia Resources Investment Corporation (BCRIC). The government acquired its interest by assuming debt obligations of \$78 million. At the time of takeover the mill was obsolete and costs of production were very high. The market for sulphite paper was also depressed and major pollution problems required attention. The government spent an additional \$20 million on modernizing the mill and reduced the workforce (while providing various forms of assistance to laid-off workers). The company became profitable and in 1979 was indirectly reprivatized through the gift and sale of shares in BCRIC (its holding company) to the public.

This catalogue of provincial bailouts of failing firms – both those that had previously had an unassisted market existence and those nurtured into life by government and then supported during subsequent financial travails – is by no means complete. It is meant to be illustrative rather than comprehensive. Additional, smaller-scale government takeovers of failing firms are listed in Sexty (1981) and reproduced in the appendix to this chapter.

Apart from the regional-development theme that runs through most of the postwar cases canvassed so far, federal involvement in certain bailout-type activities seems to reflect other considerations. The takeovers by the federal government of Canadair in 1976 (detailed later in this volume) and De Havilland Aircraft of Canada Ltd. in 1974, each for \$38 million (Gordon 1981, 83; Sexty 1981) seem to have reflected a concern with establishing a presence in what was perceived as a high-technology sector with high growth potential (the aerospace sector), particularly given the government's previous withdrawal from military-aircraft manufacture through the cancellation of the Avro Arrow project. Both companies taken over had substantially reduced their activities and workforces in Canada, in part because of a depressed demand for their products but also because (at least in the perception of the government) their foreign-based parents (British-based Hawker Siddeley in the case of De Havilland; General Dynamics Corporation of St. Louis in the case of Canadair) were more intent on developing products at the

parent plants than in investing in R&D in Canada, despite having received massive direct and indirect (procurement) subsidies from the Canadian government in the past. Thus, both attempts to pick and support winners in new growth fields and concerns about the influence of foreign ownership on local-investment decisions seem to have been influential factors in the takeover decisions.

Another set of federal policies that possesses some bailout characteristics falls into the general class of trade-adjustment assistance measures (Mathews 1971; Stegemann 1973, ch. 4; MacNeil 1982, 46ff.; Ritchie 1983; Pestieau 1976; Jonish 1970; Trebilcock, forthcoming). The earliest example of such a measure was probably the Automotive Adjustment Program that enabled Canadian automotive firms to restructure their operations to function effectively in the free market in automotive parts established under the Canada-United States Auto Pact, and to provide supplementary unemployment benefits and retraining subsidies to workers laid off because of changes in competitive conditions. Following this, the General Adjustment Assistance Program (the forerunner of the Enterprise Development Program) that was established in 1968 provided general financial assistance to firms in response to the Kennedy Round of tariff reductions. Outlays under these programs appear to have been small, as the adjustment costs were reduced by the expansionary state of the economy at the time.

A special set of trade-adjustment measures was also put in place in the textile sector to enable firms to restructure so that they could contend with import competition and to curtail the effects of labour layoffs by providing supplementary unemployment benefits. The Industry and Labour Adjustment Program (ILAP) and the Canadian Industrial Renewal Board (CIRB) and associated programs have provided further forms of adjustment assistance. In addition, the Labour Adjustment Benefits Act passed by Parliament in 1982 provides for supplementary unemployment benefits for workers in any industry designated as undergoing significant economic adjustments of a noncyclical nature.

Patterns in the policies

Sufficient episodic evidence has been presented to support the general point that province-building and regional development from the late 1950s to the late 1970s explains a large fraction of the bailout-type assistance provided by governments during this period. The diversity of

sectors where examples appear stands in strong contrast to the quite discrete bodies of bailout experience prior to World War II. While Bliss (1982) argues that the National Policy did not imply nearly as coherent a subset of policies as many historians have assumed, the bailouts of the canals, the railways, and the wheat pools can be rationalized in terms of ostensible major national-development objectives. Most other business failures did not attract bailouts. For example, of the seventy-two chartered banks that operated in Canada between 1867 and 1914, twenty-six failed (36 per cent) with losses to creditors and shareholders in excess of \$40 million. In addition, dozens of private banks failed during the same period. None of these failures attracted rescue efforts by government (Naylor 1975, chs. 4,6; Neufeld 1972, chs. 4,6). It is, of course, true that government assistance to Canadian Pacific, Canadian Northern, and the wheat pools can be viewed as indirect bailouts of certain major banks, but in these cases, the importance to the political economy of Canada of the activities which the banks had financed was clearly the dominating factor.

As Bliss (1982) himself notes in describing industrial strategies in the postwar years, they present a picture of 'blooming, buzzing confusion'. However, he goes on to note one point of commonality with the past: 'the subsidization phenomenon of the 1960's and 1970's was a repetition on the provincial level of the municipal bonusing phenomenon of the late 19th century'. But given the severe constraints on the taxing base of the municipalities and the small size of most secondary-sector enterprises in that earlier period, the provinces have often been playing for much higher stakes. Another point of commonality remains: the relative willingness of Canadian governments at both levels to employ public ownership as a bailout instrument of last resort. A further common feature appears to be the absence of clear ideological differences – at least as reflected in party politics – towards firm-specific government subsidies. Conservative, Liberal, and NDP governments have all, with some frequency, at either federal or provincial levels, pursued such policies.

One major institutional change in the era under review that may well explain, in part, the greater predisposition towards intervention by governments through firm-specific assistance is the increasing bureaucratization and institutionalization of the industrial-assistance process. Prior to World War II, most federal and provincial bureaucracies were tiny, and industrial-assistance decisions of any magnitude were handled by the political organs of government. However, during the postwar

period, most provinces created development arms or corporations to stimulate investment in their provinces, and the federal government, through the creation of the Department of Regional and Economic Expansion (DREE), the Federal Business Development Bank, the Enterprise Development Program in the Department of Industry, Trade and Commerce, along with a host of other industrial-assistance programs, fostered large bureaucracies with missions that implied a much more sustained and extensive interventionist role in promoting and shaping economic development. It would be surprising if this institutionalization of industrial-assistance policies did not create bureaucratic incentives that were conducive to a more sympathetic attitude to bailout-type interventions and corresponding private-sector expectations or dependencies.

The *Globe and Mail* (1983b) claims that the recently defeated federal Liberal government was considering a major shift in emphasis in future industrial policy towards supporting winners rather than saving losers. The general historical experience, particularly at the provincial level in postwar years, that has been reviewed in this chapter may justify some scepticism that the one task presents any fewer hazards to government than the other.

THE CURRENT BAILOUT PHASE: THE LATE 1970s AND EARLY 1980s

Recent bailout cases, summarized in the appendix to Chapter 1, are examined at length later in this study and it is therefore premature to attempt any detailed interpretation of them in terms of either general or specific characteristics or policy implications. However, in concluding this historical review of the bailout phenomenon in Canada, several observations about current experience may be in order. First, it is immediately evident that, again, the current cases reflect interventions in a widely diverse range of economic sectors in sharp contrast to the bailout phenomenon in the period prior to World War II. Second, most of the firms that have been assisted had a prior market life of their own and had not been, in effect, joint ventures between the private and public sectors from the outset as was the case with the canals, the railways, and many of the provincial development projects reviewed earlier. In this sense, the enterprises were not initially conceived of as major instruments of public policy, with the partial exceptions of Dome Petroleum (which came to be viewed as a central element in the federal government's National Energy Policy) and the Atlantic fish-processing

firms (whose restructuring has been conceived of as an aspect of a more general rationalization of the Atlantic fishing industry). Third, few of the recent assistance measures have resulted in takeovers by the government (and consequent public ownership), perhaps reflecting a perception that in most cases the assisted firms are viable economic enterprises undergoing temporary rather than long-term financial difficulties, probably induced in part by the recent recession. Whether these observations are fully justified and what policy implications flow from them must await a more thorough review of the data in ensuing chapters of this study.

CONCLUSIONS

Does history offer us any lessons of contemporary relevance to the bailout phenomenon?

First, it is clear that the recent round of business bailouts is by no means an isolated phenomenon in Canadian economic history. While the configuration of the bailout phenomenon has changed over time, if the past is any guide to the future, the need for bailouts will remain in one form or another as a recurrent problem for policy makers in the future. Indeed, one might speculate that political considerations such as the increasing institutionalization of industrial-assistance policies and greater decentralization and regionalism in the political economy of Canada, along with increasingly rapid rates of technological change and shifts in comparative advantage in a more competitive and demanding international economic environment, may well render the problem more pervasive in the future.

Second, *ad hoc* forms of government assistance to failing firms, typically in an apparent crisis environment, make government decision-makers vulnerable to strategic behaviour on the part of supplicants for relief in terms of the form and scale of relief sought, and vulnerable thereafter to opportunism on the part of recipients of relief in terms of adherence to the terms of the assistance agreed to. This vulnerability on the part of government is not only a function of the limited ability of government decision-makers to evaluate initial claims for assistance and to monitor performance thereafter, but is also a function of the political costs of acknowledging highly visible mistakes once an initial and public commitment has been made to a firm.

Third, the *ad hoc* type of assistance typically involved in most bailout cases tends heavily to politicize the managerial environment of failing firms and places substantial premiums on the rent-seeking and political support and accommodation abilities of management, in addition to, and sometimes at the expense of, more productively oriented skills.

Fourth, the increasingly decentralized and regionalized nature of the Canadian political economy, especially since World War II, has created strong pressures at the federal level to respond to regional pressures to promote and preserve locationally directed economic activities, especially given the regionally differentiated power bases of the major political parties that have prevailed until recently. At the provincial level, increasing political fiscal autonomy has created incentives to engage in interjurisdictional competition to attract or retain firms that often lead to a zero- or negative-sum form of 'bonusing'. This in turn creates pure windfall gains to recipient firms or comes to entail indefinite commitments of support to an activity which faces long-run comparative locational disadvantages that initial grants of support cannot readily offset in full. The institutionalization of the industrial assistance involved at both the federal and provincial levels gives further impetus to these trends by creating vested interests in both the public and private sectors. These factors, taken together, have also increased the returns to rent-seeking activities in our political economy.

Fifth, in terms of the choice of bailout instrument, historical experience suggests a strong bias towards off-budget loan guarantees to failing private-sector firms as the favoured instrument, largely because of their low political visibility, whatever their efficiency properties as an instrument. With the more extreme response of public ownership of failing firms, problems of attenuated accountability have arisen. Structuring incentives for efficient management on the one hand and an appropriate legislative and executive oversight mechanism on the other, especially with respect to the achievement of noneconomic objectives, have led to persistent difficulties.

Sixth, even though economic recessions clearly were an important factor in many of the major bailout episodes in the past (i.e., the Welland Canal, the Canadian Pacific in the 1880s, the nationalization of the railways following World War I, the wheat pools), the earlier bailouts were more readily reconciled with some major and explicit elements of national political and economic policy. More recent bailouts, particularly in the decentralized political environment that has evolved since

World War II, lack this conceptual coherence and pose more subtle explanatory and justificatory challenges from both economic and political perspectives.

NOTE

- 1 For excellent discussions of the wheat pools, see Fowke 1957; MacGibbon 1932, 1952; Patton 1928; and Wilson 1978, 1979.

CHAPTER 2 APPENDIX

Selected list of business failures and rescue enterprises

Public enterprise	Government	Date of takeover	Approximate employment at takeover	Approximate employment recently
Canadair Limited	federal	1976	1,400 (9,260 – 1968 peak)	6,000
Cape Breton Development Corp.	federal	1967	7,000	4,300 (coal) 500 man-years (noncoal)
De Havilland Aircraft of Canada Limited	federal	1974	2,500 (5,200 – prior peak)	4,500 (3,000 – additional expected)
Nfld. Dockyard & Engineering (CN) Limited	federal	1949	n/a	n/a
Canadian Cellulose Company Ltd. (CanCel)	British Columbia	1973	3,000 (plus loggers)	2,500 (plus loggers)
Kootenay Forest Industries Ltd.	British Columbia	1974	n/a	n/a
Ocean Falls Corp.	British Columbia	1973	230 (plus loggers)	400 (plus loggers)
Plateau Mills Ltd.	British Columbia	1973	280 (mill) 100 (loggers)	n/a
Flyer Industries	Manitoba (MDC) ^a	1971	200 (1976)	n/a
Manitoba Forestry Resources Ltd. (formerly Churchill Forest Industries)	Manitoba	1973 (from MDC)	1,200	1,200
Saunders Aircraft Ltd.	Manitoba (MDC)		500 (1975)	Receivership (1976)
Venture Manitoba Tours Ltd.	Manitoba	1971	n/a	n/a

CHAPTER 2 APPENDIX (cont'd)

Public enterprise	Government	Date of takeover	Approximate employment at takeover	Approximate employment recently
Bricklin Canada Ltd.	New Brunswick (67%)	1974	700	Receivership (1975)
Brunswick Mills Ltd.	New Brunswick	1976	150 (mill) 150 (indirect)	n/a
Provincial Holdings Ltd. (textiles)	New Brunswick	1973	225	n/a
Atlantic Gypsum Ltd.	Newfoundland	1952	n/a	Sold (1979)
Labrador Linerboard Ltd.	Newfoundland	1972	1,700 (1975) 300 (loggers)	900 (est.) plus loggers
Marystown Shipyard Ltd.	Newfoundland	1967	130 (initial) 500 (peak)	600 +
Nfld. Fiberply Ltd.	Newfoundland	1959	n/a	n/a
Nfld. Hardwoods Ltd.	Newfoundland	1950	n/a	n/a
North Star Cement Corp.	Newfoundland	1951	n/a	Sold (1978)
United Cotton Mills Limited	Newfoundland	1951	n/a	n/a
Clairtone Sound Corporation	Nova Scotia	1970	1,000 (construction) 200 (operating, projected)	n/a
Sydney Steel Corp. (SYSCO)	Nova Scotia	1967	3,200	3,200
Sidbec	Quebec	1968	3,500	5,000
Georgetown Shipyard Incorporated	PEI		n/a	n/a
TOTAL APPROXIMATE EMPLOYMENT			28,500-36,000	29,000-32,000

^a MDC = Manitoba Development Corporation

SOURCE: Compiled by research from personal files.

3

Economic rationales for bailouts: theory and applications to labour markets

In a bailout situation, the market presumably is not willing to sustain the firm because it is not economically viable in the long run; cash-flow problems, for example, that are only short run would be recognized as such by the capital markets so that bridge-financing would be provided. We say presumably, because there is always the possibility that the company *is* viable in the long run and that the owners know this, and that the threat of 'going under' is part of a bluffing strategy or 'gaming' behaviour to get public support (Evans 1983, 22) or to win wage concessions from workers. Such behaviour is to be expected in a 'rent seeking' society that includes the government as an active participant through its regulations, legislation, purchases, subsidies, taxes, and transfers.

In most circumstances, however, a bailout request is indeed looked upon as a genuine last resort for a corporate entity as a whole. This notion is consistent with our definition of a potential bailout as a firm that faces actual or potential insolvency. To be credible, threats occasionally have to be carried through. In addition, admitting the need for a bailout is likely to have adverse effects on customers (especially where warranties are involved), creditors, and the morale of the workforce. Gaming behaviour thus is more likely to occur in situations where corporations threaten to close a *particular* plant since customers and creditors may well view this move positively as a way of rationalizing production. Such threats could also pressure workers to make wage concessions and governments to compete with each other in providing subsidies.

For the most part, then, we can take a bailout request to mean that the market does not consider the potential bailout to be economically viable

in the long run. That is, it does not expect that future revenues will be sufficient to cover expected costs (including a normal return on capital) because of some combination of insufficient demand and inputs that are being paid more than they would get elsewhere. Production costs may also be considered too high because inputs are used inefficiently, either in the wrong combination or in a manner whereby they do not yield their maximum output. Here, the market is basically indicating that it would be more profitable to utilize the firm's resources in alternative activities and, if such alternatives do not exist, that the costs are 'sunk costs', and hence irrelevant to the decision to carry on production.

It is a basic tenet of welfare economics that in competitive market conditions and in the absence of market failures, such private calculations as the ones outlined above coincide with the socially efficient ones that they lead to maximum output from a given set of inputs. The key question thus becomes: what are the *specific* sources of market failure that could make these private calculations differ from those that are considered socially optimal?

The purpose of this chapter is to review the theoretical arguments advanced to explain market failure¹ and to discuss their *general* applicability to the bailout decision. It is important to recognize that while theoretical explanations of how markets might fail to yield socially desirable outcomes can be taken as a rationale for public intervention, many of the same problems nevertheless will be faced by public authorities. Therefore, an overall assessment of whether or not public intervention is justified would require a comparison of what is likely to be an imperfect *private-market* solution with what is likely to be an imperfect *public-sector* solution (Dahlman 1979, Wolf 1979).

There are numerous ways to categorize possible market-failure problems. However, most can be grouped under the general and interrelated rubrics of market failure to achieve allocative efficiency, market imperfections, and market failure to achieve distributional equity, the latter pertaining to the distribution of income. In this chapter, we will examine these general categories of market failure mainly as they apply to labour-market issues. Chapter 4 will examine possible failures in the capital market, especially with respect to the redeployment of assets, and failures in the bankruptcy market, especially with respect to strategic behaviour in the insolvency bargain. Each of these will be examined in turn with particular emphasis on their general relevance to the bailout decision.

MARKET FAILURE TO ACHIEVE ALLOCATIVE EFFICIENCY

In the absence of market failures, an unregulated competitive economy will achieve an efficient allocation of resources such that output is maximized for a given set of inputs. What then are the sources of market failure that could prevent the private market, if left on its own, from achieving a socially efficient allocation of resources?

Externalities

Externalities or third-party effects provide the classic rationale for government intervention to ensure the efficient allocation of resources in the economy. Externalities occur when the actions of market participants directly affect the utility of consumers or the production capabilities of producers *and* when the market does not automatically extract appropriate payment², usually because of the absence of well-defined property rights, which can in turn be due to the transactions costs of establishing such rights (Dahlman 1979).

Real versus transfer or pecuniary externalities

In dealing with externalities, it is important to make a distinction between real and transfer or pecuniary externalities. Real externalities involve a loss or gain of real resources and hence have implications for efficiency and ultimately total economic welfare. Transfer externalities involve income transfers between the parties; if achieved through price changes, they are often termed pecuniary externalities. Such pecuniary externalities can have important distributional or equity effects; however, by themselves they do not have *direct* real allocative-efficiency effects, since what one party gains another party loses. While they may be important for reasons of equity or fairness and therefore for political decision-making, these issues should be distinguished from ones involving allocative efficiency and hence the ultimate size of the economic pie. Of course, society's welfare can depend on both allocative efficiency and the distribution of wealth; hence, pecuniary externalities can have welfare implications, albeit their direct effect is through the distribution of income and not allocative efficiency.

Third-party effects in the form of pecuniary externalities in fact can be the sign of a well-functioning economy, with price changes serving to allocate resources to their most efficient uses. Such price changes can

affect different parties in different ways and hence have important equity implications. However, they do not reflect a failure of the market to achieve allocative efficiency.

Indirect implications of pecuniary externalities for efficiency

While these pecuniary or transfer externalities do not have *direct* implications for allocative efficiency, they can have indirect effects that ultimately can affect allocative efficiency. As in many areas of economics, issues of efficiency and equity are not always easily separable. Since transfer externalities by definition involve losers and gainers, they may create losers that resist, perhaps through the political process, any changes that generate their losses; this resistance in turn may impede or block changes that improve allocative efficiency. This is particularly relevant when the losses are current and concentrated in a specific group that can generate political pressure or perhaps sympathy because of its low-income status, and when the benefits are diffused over time or across larger numbers or higher-income groups.³ It is true, by definition, that an efficient change provides the means to make everyone at least as well off (a *potential* Pareto improvement), but this does not mean that everyone will actually be made better off (or that there will be an *actual* Pareto improvement). In such circumstances, compensating the losers for their negative externality – even though it is a transfer and not a real externality – can have efficiency as well as equity implications through reducing their resistance to efficient changes.⁴

Japan's technological revolution, for example, in part may be attributed to worker support that is facilitated by a system of guaranteed lifetime employment in some cases. In contrast, worker resistance to such changes in North America stems in part from their perceived wage and employment losses – the negative pecuniary externalities they will experience. We tend to think of the vicissitudes of the market, and particularly rapidly responding prices, as a necessary ingredient for market efficiency. Nevertheless, when such price changes are the fundamental component of peoples' income – as is often the case with wages – such price changes and associated efficiency changes will often be resisted. Guaranteeing a degree of wage and employment stability or providing for retraining and relocation (i.e., reducing negative pecuniary externalities) may reduce this resistance and hence facilitate efficiency.⁵ This is in contrast to the conventional wisdom that guaranteeing income

will simply reduce the incentive to work; it may do so, but it may also reduce the incentive to resist change, and the latter may have positive efficiency implications.

Pecuniary externalities can also have efficiency implications in another indirect fashion. In a 'second best' world with price distortions (more will be said about this later) emanating from such factors as tariffs, transferring resources from sectors where prices are set above competitive prices to sectors where prices are set competitively would involve a price reduction (a negative pecuniary externality or loss of monopoly rents to one party) *and* an efficiency gain. In such circumstances the reduction in the pecuniary externality, although a transfer, is also a proxy for an efficiency gain.

Whether the pecuniary externality is a proxy for efficiency changes or a factor that will affect resistance to efficiency changes, it can obviously have indirect efficiency effects as well as its well-known distributive effects. Nevertheless, it is important to remember that the efficiency implications of changes in pecuniary externalities emanate from the ultimate real changes that they indirectly engender.

Congestion externalities

Congestion externalities occur when the actions of one party impose congestion costs on other parties and the market does not automatically extract payment. Obvious examples are the decision to enter an already congested highway or the decision to move to an overcrowded city. In the absence of corrective prices or taxes, individuals in making their decisions take into account only their own costs incurred, ignoring the congestion costs they may impose on others. Hence, the private market may yield a greater-than-socially-optimal amount of such congestion-generating activities.

This argument has been applied to the labour market especially with respect to mass layoffs.⁶ In such circumstances, unemployed workers not only incur their own private job-search costs, but they also impose costs on other job-seekers by lowering the probability of getting a job. The long queues of applicants in times or places of mass unemployment reflect the external search cost that workers impose on each other by entering the queue, just as individual motorists impose external costs on each other by entering an already crowded highway. As in the traffic-congestion analogy, externalities are created only if the road (or job-search process

in the labour market) is sufficiently crowded (filled with unemployed) so that it cannot readily absorb the traffic (unemployed) without slowing down the travel time (waiting time) of other travellers (unemployed).

Analogies notwithstanding, the extent to which job search generates net negative externalities is a debatable point. It is not the fact that a job-seeker may take the job that another unemployed worker could have taken that is the source of the externality; such displacement takes place in all markets when individuals pay for and consume goods that therefore cannot be consumed by others (who presumably were not willing to pay as much). In these circumstances, the market is functioning efficiently by allocating goods to consumers and jobs to workers who value them most.

Rather, the congestion externality must occur because the search procedures of some persons affect the search times of others and the market does not automatically extract compensation. For this to be true, it should be a general proposition of search in crowded markets that the private market can yield a greater-than-socially-optimal amount of search to the extent that capacity constraints create congestion externalities that raise the search time of all participants. To a certain extent, capacity and prices (e.g., wages in the labour market) can adjust in response to congestion.⁷ And while a plant closing may augment unemployment indirectly as spouses add themselves to the labour market to maintain an otherwise declining family income, others may adjust by being discouraged from looking for work, given the mass unemployment. It is also the case that while search on the part of one worker can impose costs on other workers by reducing their probability of finding a job, the worker's very process of job search creates benefits to firms by increasing their probability of filling a vacancy. Even with respect to other workers, this search can generate *positive* externalities in the form of information about market conditions, job openings, or skills in demand. Further, there is the possibility that the externality costs of search on the part of *workers* is offset by a greater-than-socially-optimal amount of search (recruitment) on the part of *firms*. This could occur if an individual firm only considers its private recruitment cost and not the additional recruitment cost it may impose on other firms who have to hire from a reduced pool of job-seekers or unemployed.⁸

In such circumstances it is not possible to ascertain whether search generates more positive information externalities or more negative congestion externalities. It is the case, however, that the mass layoffs

that could characterize situations where a bailout is not forthcoming, especially in a time or place when the pool of unemployed already is congested (e.g., in a recession or a one-industry town), is more likely to be associated with negative congestion externalities than positive information externalities. The information is already there (i.e., jobs are not available) and additional unemployed workers are more likely to impose congestion costs on other workers. In such circumstances the labour market can yield a greater-than-socially-optimal amount of search unemployment. The adverse psychological effects also may be worsened disproportionately in a situation of mass unanticipated layoffs, although this may be mitigated somewhat by the 'shared misery' and the fact that the *individual* workers may not be at fault.

An appropriate policy response in the face of such negative externalities is to tax the generator of the externality by the amount of the externality or to subsidize the generator *not* to produce the externalities. The two policies have similar efficiency implications by attaching the correct price or cost to the externality. Obviously, however, they have different distributional consequences, since in one case the producer of the externality is being taxed and in the other subsidized. (Either policy in turn could yield some second-order efficiency effects that would emanate from the different wealth distributions.) To the extent, then, that workers whose jobs are being threatened *en masse* are deemed worthy of a subsidy so as not to congest the ranks of the unemployed (as opposed to a tax if they do so), a bailout that prevents such mass unemployment (or even postpones it to a time when the unemployed can be absorbed more readily) may have an efficiency rationale. The appropriate amount of the subsidy for this purpose would be the minimum amount necessary to prevent mass unemployment after all wage cuts have occurred, so that unemployment truly would be the next alternative.

Merit goods

While there is substantial agreement that the private unregulated market, even if competitive, does not properly account for externalities, there is less agreement about the ability of the private market to achieve allocative efficiency on other grounds. One of these grounds pertains to what have been labelled 'merit goods' – goods that people 'should' consume, or be able to consume freely. Precisely what goods have merit is

really a matter of personal opinion (e.g., that there should be more food or housing for the poor; library services and basic education for all members of a community; or laws against certain drugs and prostitution). Sometimes the absence of such goods is associated with externalities (e.g., where there are no laws against certain drugs or where inadequate housing has led to slums, crime rates may be higher) and eventually with state intervention (e.g., when malnutrition of the poor eventually leads to higher medical expenditures by the government). In the former case, the market-failure problem should properly be viewed in the context of externalities, and in the latter case in the context of redistribution (to be dealt with later in this chapter).

Even when there are no externalities and redistribution is not an issue in the absence of certain merit goods, society may deem that the private market does not yield a socially optimal amount of them. Economists tend to feel uncomfortable with such a notion (except, for example, when it comes to goods deemed necessary for the welfare of children or the mentally handicapped), since it violates the principles of consumer sovereignty and involves notions of paternalism. It is also argued that rent-seeking can be done under a number of guises associated with protecting the 'public interest', including the provision of merit goods or the prohibition of 'merit bads' such as addictive drugs or prostitution.

In spite of the predilection of economists, the general public often uses the political process to alter consumption and production from what the free-market allocation would yield for certain goods. In addition to the examples cited earlier, domestically produced goods or a presence in certain industries can be thought of as items that seem to be valued (by some at least) as ends in themselves, over and above what the indirect effects of encouraging those ends may be.⁹ In many cases, issues of national prestige (e.g., Olympic Games), security, or unity (e.g., official bilingualism) also seem to be involved. And while such objectives certainly can be legitimate, it is also important to point out that they can only be obtained at a cost.

Option demand

Consumers may be willing to pay a price to have some commodities available for use even though they seldom if ever use them. Such option demands are more likely to be prevalent for infrequently used services or for services that may not be used at present but that may be used in the

future if they are available. Private consumers, for example, may be willing to pay a premium to have the option to use public transit, wilderness parks, or secure energy sources. However, the market cannot capitalize on these option demands if payments are only extracted when the commodities are used. (Note the similarity of this option-demand problem to the problem of externalities.)

The extent to which markets exist for such optional services is a matter of debate. Obviously, however, option markets can and do exist for certain tradeable assets and contingent claims, and it is possible to establish multipart pricing schemes in order to extract payment from infrequent users. Further, from a theoretical perspective, as an option demand resembles closely the notion of consumer surplus (where there is willingness to pay in order to have something at a certain market price), its availability would be maximized in a competitive economy.

Irreversible decisions

Many of the merit-goods and option-demand arguments take on particular appeal when they are subject to irreversible decisions. In such circumstances, it is possible that a market solution that respects consumer sovereignty would lead to outcomes that are difficult or costly to reverse should consumers want to do so in the future. This could be the case, for example, with respect to issues as diverse as land use, drug consumption, the security of domestic supplies, and national defence. Consumption-production decisions that seem 'right for the moment' may thus be regarded by some as essentially short term and opportunistic.

To a large extent, these irreversible outcomes are related to inter-generational and intertemporal externalities, the public-goods nature (see note 2) of certain consumption decisions, or the real information difficulties associated with discounting for future risk and uncertainty. Nevertheless, they represent a set of problems that generate considerable collective concern in the minds of the general public with respect to the ability of the private market to yield a socially desirable solution.

It should be pointed out, however, that the market can adapt to irreversible decisions, often in subtle ways. For example, such decisions can be discounted more heavily by private actors, and future consumers can be represented in today's marketplace since they represent future sales. The issue, then, is not whether the private market can handle irreversible decisions, but whether it handles them in a socially optimal fashion.

Externalities applied to bailouts

In the discussion of bailouts, the externality or third-party effect that receives the most attention pertains to the labour externality that results if there is no bailout and workers (both those directly and indirectly affected by the shutdown) are displaced to their next-best-alternative activity, which may involve a combination of such factors as unemployment, a lower-paying job, retirement, household activities, or leisure.¹⁰ The issue is particularly acute when there is also the possibility of a congestion externality.

Other indirect third-party effects have also been identified. Failure to bail out a firm can result in other jobs being lost, both in sectors that supply the failing industry and in sectors that provide further 'value added' to the product (e.g., respectively, parts suppliers and dealers in the auto industry). The third-party consequences can go even further as multiplier effects spread from reduced consumption and investment spending. Especially in one-industry towns and in situations where workers are less likely to be absorbed into alternative employment, problems such as crime, suicide, and marital instability can increase, housing prices and tax revenues can fall, and welfare and unemployment insurance can proliferate (see Ch. 5., note 3). In some circumstances the loss of industry may result in reduced public expenditures that may offset the tax losses. However, the social services associated with displaced labour in most cases will generally increase.

In the context of a market failure to achieve allocative efficiency, these third-party effects are mainly transfer or pecuniary externalities, since they emanate from price changes (e.g., wage reductions or a fall in the price of housing) or from changes in transfers¹¹ (e.g., increased unemployment insurance, welfare, or reduced taxes). They are the byproduct of market adjustments towards allocative efficiency, even though they themselves can have very severe distributional effects. As mentioned previously, these distributional effects can have *indirect* efficiency feedbacks if they result in sufficient political pressure to impede the efficient change, or if they are an indirect proxy for other real changes.

The *laissez-faire* or neoclassical economic perspective would argue that such price changes are the inevitable result of the market functioning rather than failing (i.e., they are part of Schumpeter's 'gale of creative destruction'). Here, it is implied that resources are *ultimately* being reallocated to more profitable uses, where revenues are higher

and/or costs – including possibly wage costs – are lower. According to the neoclassical perspective, a well-functioning market already would have incorporated the real risks of bankruptcy into various prices. Creditors would have included a risk premium in the interest rate they charged; workers would have received a compensating wage for the risk of ultimate job loss and even for expected pension or other deferred-wage losses. In one-industry towns where it is difficult to diversify against the real risks, such compensating wage premiums would be even higher. Housing prices would also include a risk premium (and/or perhaps the company would own the housing stock, as the risk could then be better diversified through shareholders). In such circumstances, it is not surprising that dramatic wage and housing-price reductions would occur, as they are associated with the movement of resources with a price premium for high *ex ante* risk to *ex post* situations where the negative outcome of that risk has come to fruition. According to the neoclassical perspective, *ex post* compensation in such circumstances would involve double compensation, as market prices already reflected a risk premium. In addition, if compensation or bailouts became a likely anticipated phenomenon, then market-price premiums would dissipate because of the reduction in real risk.

Even with respect to third-party effects such as crime, increases in transfers and welfare, or reductions in taxes, the *laissez-faire* perspective would argue that such externalities are likely to be larger in situations where resources are not ultimately allocated to their more efficient uses. An economy that continually sustains inefficient enterprises is likely to lose its ultimate tax base, not be able to afford transfer payments, and ultimately end up with more antisocial behaviour emanating from slow growth. At the very least, it is argued that the third-party effects of slow growth have to be traded off against the third-party effects of the more rapid growth associated with a changing economy. This argument highlights the key policy issue of the optimal combination of allocative efficiency and distributional equity.

Congestion externalities in the labour market could be a potential source of market failure to deal with the adjustment problems of displaced labour. Such could be the case in a number of situations relevant to bailouts: when mass layoffs occur in communities dominated by a particular firm; when workers are relatively homogeneous in their skills; when displaced workers all are likely to enter the local pool of job-seekers (as opposed to retire, enter the household or educational institu-

tions, or leave the area); or if the economy is in a state of recession. The extent to which these congestion externalities can be internalized by market actions such as wage cuts or the entry of new firms thus remains a relevant issue.

The relevance of merit goods, option demands, and irreversible decisions to bailouts depends, in part, on the extent to which these are considered to reflect market failures. Certainly some individuals attach an intrinsic value to such elements as domestically produced goods, a national presence in an industry, secure sources of energy supply, and the prestige associated with certain industries. And any of these elements may be jeopardized by the failure of particular enterprises, especially if they are the dominant or only remaining firm in the sector and involve largely irreversible decisions. The key issue here, of course, becomes one of identifying the costs of such irreversible decisions so that they can be traded off against the benefits presumed by those who value them.

MARKET IMPERFECTIONS

The *laissez-faire* perspective associated with neoclassical economics is often criticized on the grounds that markets in fact are not sufficiently competitive to yield desirable efficiency results. Four general strands of arguments on how public intervention arises out of market imperfections can be presented: they concern monopoly problems; market-adjustment problems; 'second best' problems; and macroeconomic problems.

Monopoly problems

In situations of natural or contrived monopoly, the monopolist will be able to restrict output and charge a price above the marginal cost of production. Output is less than socially optimal and welfare losses result because, even though consumers are willing to pay for additional output in excess of its cost of production, the unregulated monopolist will not increase output. Instead, he or she will maximize profits by ensuring that marginal revenue and not price equals marginal cost.

There are at least two ways in which the monopoly problem may impinge upon the bailout decision. First, if there are only a few firms in an industry, then allowing one of the firms to go bankrupt may enable the other firm(s) to behave more monopolistically. The extent to which they can behave as monopolists of course depends upon other sources of

competition, both domestic and foreign. Second, if the market alternative to a bailout is a merger, there may be concern that the resulting firm would acquire monopoly power, with all its associated inefficiencies. The government may thus bail out an inefficient firm rather than allow a merger that would lead to monopolistic behaviour.

The choice between a bailout and paving the way for a monopoly should depend upon which comes closest to yielding the higher overall level of efficiency. It thus depends crucially on the extent to which antitrust legislation does in fact facilitate efficiency.

Market-adjustment problems

Public intervention in private markets has also been advocated in situations where nonmonopolistic markets exist, but where there are problems associated with the market-adjustment process. In most of these circumstances, however, these problems would prevail in any economic system, whether it relies on the private market, on public-planning authorities, or on any mixture of the two: they arise because of imperfect information, adjustment costs, and risk and uncertainty.¹² Hence, the relevant question is: are these problems handled better by the private market or by public intervention?

Market-adjustment problems arising from imperfect information have been pointed to as a justification for government intervention especially in situations where information may have public-good characteristics, where deception is possible, or where the consequences of imperfect information are severe (for example, when it pertains to health and safety). Imperfect information can result, for example, in firms with large debt positions being saddled with high interest payments (as in the late 1970s, when few anticipated the unusual rise in interest rates), or firms being vulnerable to energy-price increases or a series of poor harvests. Imperfect information may also prevent employees, even if unionized, from knowing of the potential insolvency of the firm. This in turn may prevent them from demanding a compensating wage for the risk of insolvency or from refusing to accept much of their compensation in the form of deferred wages, and hence leave them in a particularly vulnerable position in the event of bankruptcy.

The problem of imperfect information is also at the heart of the problem of strategic behaviour in the insolvency bargain. Not knowing how the other creditors will behave creates an incentive for opportunistic

behaviour and gaming strategies rather than for a co-operative solution. Further, information problems make it difficult for the capital market to assess whether a cash-flow problem is simply short-run or symptomatic of long-run economic inviability. In addition, the problem of imperfect information often makes workers reluctant to agree to wage concessions in suspicion that the firm is bluffing about its financial plight. This suspicion may be well-founded, since it is often in the firm's interest – and within its means – to exaggerate its inability to pay so as to reduce wage demands. Clearly, in these situations characterized by imperfect information, the possibility of bankruptcy becomes very real, and it may be precipitated almost inadvertently by groups acting under that imperfect information.

Information, however, is costly. We can thus expect that the problem of optimal decisions being made subject to uncertainty and information problems will prevail in any system, public or private. Nonetheless, private firms are in the business of making decisions based on costly information: to say that some did not anticipate certain exogenous events or diversify against them also says something about their business acumen, especially when other firms faced the same problems and survived. The imperfect-information problem also means that it is difficult to tell if firms are 'bluffing' about their financial plight so as to receive bailout assistance – a problem that would be exacerbated if bailouts were a regular occurrence.

Market-adjustment problems may arise from time lags and adjustment costs.¹³ Movement to a new equilibrium, even if it is ultimately more efficient, may be costly and disruptive and involve a loss of real resources. Government intervention may be advocated as a way to minimize these costs.¹⁴

As applied to bailouts, the arguments for government intervention would be that allowing inefficient firms to fail is an extremely costly mechanism for achieving efficiency, especially in terms of the adjustment or transition costs of workers; that inflexible wages increase the duration of search unemployment¹⁵ and its associated output loss; and that adjustment costs can also emanate from the loss of sector-specific rents, the costs of adjustment services, and the general-equilibrium effects on other workers.¹⁶

The problem is compounded in situations where it is unlikely that workers could have anticipated the failure and therefore have adjusted to it slowly, for example through attrition. In fact, in mass layoffs the

adjustment costs are high because established intramarginal workers (often with considerable seniority) are involved, and their costs are higher than those of marginal workers who are relatively indifferent between this job and other activities. While market processes tend to emphasize adjustment 'at the margin', this does not always occur in mass layoffs. (This is expanded upon in Chapter 5.) There may also be concern that the market may 'overadjust',¹⁷ especially if the exogenous events that caused the failure of the firm prove to be temporary.

If the events are likely to be temporary, however, this should be recognized by creditors, even though their ability to react may be circumvented by strategic behaviour, as discussed subsequently in Chapter 4. Workers would be likely to defer wage payments in such circumstances. Further, while the market mechanisms still may have adjustment costs, these would likely prevail in any system that has to reallocate resources in response to changing demands (although they may be hidden more in economies that do not rely on explicit market mechanisms). In a perfectly functioning market system, adjustment costs would be already included as a relevant cost to be considered in the decision to continue or not to continue doing business. Thwarting the market signals thus may serve simply to postpone the inevitable and prevent the adjustment from occurring in a more gradual fashion.

For example, in response to permanent falling demand and the possibility of bankruptcy, employees may engage in concession bargaining, and they may also be reluctant to accept deferred compensation knowing that it may not be fully paid. (In contrast, they may also *have* to accept deferred compensation as a way of risk-sharing with the company.) Employment reductions may occur through attrition and reduced entry. Many other workers would seek alternatives elsewhere and contingency plans would be made. But in situations where bailouts are an expected outcome, the situation may become more 'all or nothing' in nature. Adaptations and contingency plans may not be made by the parties. This raises the possibility that the magnitude of the market-adjustment problems may be compounded and not reduced by the presence of the bailout as a policy instrument.

Market imperfections have also been associated with market evaluations of uncertain and risky projects, especially if the projects are large. These include perceptions that capital markets are 'too conservative' and reluctant to provide venture capital, and that some projects are simply too risky for the private sector to undertake. Arguably, the public sector

by virtue of its size can diversify away the risk better than the stock market or the capital market. This is the reasoning that appears to lie behind arguments in favour of government involvement in megaprojects.

If they have any validity, it is difficult to see how these arguments would apply to bailouts, since bailouts involve firms that had an independent market life. Hence, the firms' *ex ante* risk had already been assessed by the market and the risk was deemed worth taking. Further, both the capital market and the stock market provide mechanisms for portfolio and hence risk diversification, and joint ventures are also obviously possible in large risky undertakings.

The one area where diversification is difficult involves the human capital of workers.¹⁸ However, diversification in this area is not impossible. For example, it can be achieved by acquiring training or experience that is generally usable in a number of situations rather than just in one specific industry or company, by judicious selection of an occupation, or by receiving a compensating wage for having to undergo training that is not diversifiable and hence subject to risk. Employers could further diversify the risk (and pay a lower compensating wage as a result) by guaranteeing a degree of employment security and by engaging in a portfolio of activities, many of which are less than perfectly positively correlated with each other. Nevertheless, the realities of the North American labour market are such that, even though the human capital of workers is often a company's greatest asset, the human capital of workers is often at risk and this risk is not easily diversified.

The theory of 'second best'

In addition to market imperfections arising from noncompetitive conditions and from market-adjustment problems (the latter in turn associated with imperfect information, adjustment costs, and risk and uncertainty), there are also market imperfections that have been associated with legal, institutional, and other constraints in the market system. That is, given these other binding constraints on the economic system, it is thought that it may not always be optimal to try to achieve efficiency (or, to follow 'first best' efficiency rules) in related sectors. For example, the usual efficiency rule of setting price equal to marginal cost is appealing because what consumers are willing to pay (price) just equals the cost of producing an additional unit (marginal cost). However, if the cost of producing an additional unit of output reflects the need to

purchase some inputs at artificially high prices because of, for example, tariffs or unions, then these input prices may not reflect the true social cost of production. In such circumstances, it may not be optimal to follow 'first best' pricing rules that would always set price equal to marginal cost.

Applying this argument to bailouts would suggest that the market solution of allowing the firm to go bankrupt may not be optimal if the firm's profit-maximizing decisions were constrained not only by competitive cost conditions (in which case the market solution would be optimal) but also by legal, institutional, or other factors. These could include the purchase of inputs at tariff- or tax-distorted prices, the hiring of labour subject to wage-fixing legislation, the possibility that the Canadian banking system has not been competitive enough to provide sufficient venture-capital funds, and the legal factor of workers not being able to use their human capital as collateral for a loan that could finance any employment adjustment. If any of these additional constraints are present, the market solution of weeding out firms that cannot meet the market test may not be optimal, since they are facing more than competitive cost conditions.

The general applicability of such arguments to bailout situations is difficult to evaluate. It is difficult to assess the extent to which such noncompetitive constraints are binding on the parties in a manner that is quantitatively important. Most importantly, in such situations there are other firms which survive when faced with similar constraints. To follow efficiency rules while at the same time trying to relax noneconomic constraints (many of which may be attributable to public-policy actions) would likely be a more efficient response than to erect additional imperfections in the face of the original constraints. In essence, for the 'second best' argument to be a rationale for a bailout, one should be able to show why the noneconomic constraint is more binding on the bailout candidate than on other firms that manage to survive, and also why the noneconomic constraint should be preserved.

Many of these noneconomic constraints do arise for legitimate reasons. The most challenging policy issue then becomes one of reducing them where appropriate and adapting to them otherwise. The challenge becomes even greater when political constraints are included (e.g., a preference for Canadian ownership, or the desire to develop energy self-sufficiency, or to maintain a presence in the high-technology sector). In such circumstances, it is important for the analyst to try to assess the

costs of such political constraints, so that a judicious choice can be made as to whether or not they are worth the presumed benefits.

Macroeconomic problems

The above discussions of market imperfections and market failure to achieve allocative efficiency pertain to microeconomic problems arising at the level of the firm or individual. At the aggregate level, however, the private economy may also have problems in achieving macroeconomic goals such as full employment and price stability, the recent rise in *both* unemployment and inflation being a case in point. Whether these problems arise because of inherent imperfections or because of excessive intervention in the private market is of course a highly debated issue. Nevertheless, the problems do exist, and bailouts have to be regarded in light of them.

It would certainly be easier to accept, for example, the 'market solution' of bankruptcy and the displacement of workers to their next-best-alternative activities if the high aggregate-unemployment rate did not drastically restrict such alternative activities. If the unemployment were only frictional, then of course the market solution would be more palatable; it would represent productive job search, efficient mobility, and be a sign that the market is functioning rather than failing. But if the unemployment were structural due to a mismatch of jobs and workers or to a deficiency in demand or supply-side constraints, then the displacement of workers into such alternatives would be likely to be a more serious issue. However, there also would be concern that adjustment-assistance programs would not have much meaning if the economy at large were not providing sufficient jobs.

In times of high unemployment, the bailout instrument takes on a somewhat different light than in periods when the economy is growing, as sustained growth seems to ameliorate most economic problems. In times of high unemployment, the adjustment costs to workers are likely to be much higher, as alternative jobs are often not available and workers are more likely to end up on unemployment insurance or welfare. In such circumstances, the costs of the bailout have to be assessed against the costs of these alternatives. To the extent that a bailout is a temporary policy designed to 'buy time' and carry the firm through a period of unusually high unemployment, it may be a more palatable policy instrument. In this sense, it may shore up the firm until it has a

chance to be successful (in which case jobs are preserved) or until the economy has improved sufficiently to absorb the displaced workers and the indirect consequences of any closing.

MARKET FAILURE TO ACHIEVE DISTRIBUTIONAL EQUITY

Although the term market failure is usually reserved for issues pertaining to allocative efficiency, it is also the case that the market may fail to achieve a degree of distributional equity that is considered socially desirable. Although a consensus on the appropriate distribution of income is unlikely to exist, it certainly may be a legitimate social objective. Further, the public-goods¹⁹ nature of redistribution would mean that it may have to be handled by the public sector.

Many would argue that market intervention should be justified only on the grounds of attaining allocative efficiency. Such efficiency would provide the largest economic pie, which in turn would provide politicians with the means to compensate any losers and also would make everyone at least as well off as before it existed.

Unfortunately, the separation of efficiency and equity issues is not so simple a task.²⁰ If the losers are not compensated, then the change leading to greater efficiency may result in a larger pie that is more unequally distributed. It is certainly possible to imagine a society opposing this scenario in favour of a smaller economic pie that is more equitably distributed. In addition, as discussed previously in the case of transfer or pecuniary externalities, if the losers are not compensated, then they may attempt to block the efficiency change, perhaps through political channels or other forms of collective action (e.g., strikes). Further, compensation itself may have undesirable side-effects, such as a reduction in the incentive to work or to diversify against risk, or through the provision of income in a demeaning fashion that destroys self-respect. Thus, it is distinctly possible to imagine a society that prefers its members to receive their income through *employment* (even if this means a lower total income) rather than through unemployment insurance or welfare.²¹

Clearly, then, issues of efficiency and equity are inextricably mixed. Distributional issues are important not only in themselves but also because they can have indirect efficiency implications. Both aspects of the issues must be assessed by the policy maker. The market by itself cannot necessarily yield a socially acceptable income distribution.

Attempts to rectify this redistribution problem inevitably have efficiency implications for the market, however subtle and hidden the effects of such attempts may seem.

This sort of potential for market 'failure' is extremely relevant to the bailout decision. It suggests that public intervention to provide a bailout may be justified on equity grounds if, for example, it preserves the income of low-wage workers who otherwise may experience large income losses or be on welfare or unemployment insurance. Such is more likely to be the case when alternative opportunities for workers are scarce (e.g., when there is a recession, a one-industry town, or possibly when a number of minority workers are involved).

In order to target the assistance to these specific situations, however, an assessment is required not only of the magnitude of the expected income losses but also of their incidence. This is made difficult because the ultimate incidence of assistance is often different from what it was initially planned to be. Depending upon market conditions and the conditions of the bailout assistance, there is no guarantee, for instance, that the benefits of a bailout will ultimately 'trickle down' to workers in the form of sustained income rather than 'trickle up' to stockholders. In fact, it is not always possible to know where workers as opposed to stockholders stand in terms of income distribution. Clearly, while issues of redistribution are potentially important for the bailout decision, they must be handled carefully. Government interventions invariably create windfall gains and losses; it is important not only to understand them and assess their magnitude but also to determine that they indeed are going in the intended direction.

This discussion of distributional equity as applied to bailout decisions reminds us of a number of questions that have to be addressed in this as in most issues pertaining to redistribution: What is the extent of society's obligation in this area? What of the horizontal inequities for similar workers who may lose their jobs as part of a normal layoff procedure or because their employer was not eligible for bailout assistance? What is the *quid pro quo* for transfers to losers – should they be required to take wage concessions or to move to expanding sectors? How far should society go in the compensation process if that process interferes with the efficient allocation of resources? These are only illustrative of a few of the normative questions that are hard to face squarely but that must be dealt with nonetheless in view of the

substantial transfer costs placed on taxpayers as well as the real resource costs that may emanate from associated allocative inefficiencies.

NOTES

- 1 General discussions of market failures can be found in Gunderson (1974) with regard to the market for training; Saunders (1984) with regard to permanent layoffs in declining sectors; and Watson (1983) with regard to industrial policy in general.
- 2 Public goods are not dealt with separately here because they can be considered goods that are all externalities; that is, their benefits are equally available to all (there is nonrivalrous consumption) and it is not possible to exclude nonpayers (there is nonexcludability). Income redistribution, for example, may have public-good characteristics in that the nonpoor may benefit from transfers to the poor (through promoting altruism or social stability) and because there is no automatic market mechanism to prevent those who do not provide private charity from 'free-riding' on the charity provided by others. Hence, redistribution is often provided by the public sector through taxes and transfers. Similarly, information often has public-good characteristics if it is available to everyone once provided and if it is not possible to exclude nonpayers from using the information.
- 3 The effect on the political process of the concentrated benefits of a subsidy and its dispersed costs are emphasized in Glenday and Jenkins (1981, 7), Neufeld (1982, 22), Quinn and Trebilcock (1982, 124), and Saunders (1984). In the context of tariffs, R.E. Baldwin (1977, 3) emphasizes that not only are the benefits concentrated and the costs dispersed, but the benefits also occur in the future while the costs are immediate; hence, discounting may make the (future) benefits less attractive relative to the (immediate) costs. Discounting can obviously be important with respect to bailouts where the benefits are immediate and the costs likely to occur in the future.
- 4 Quinn and Trebilcock (1982, 119) cite numerous studies by well-known policy analysts recommending compensation to losers so as to obtain their political support for efficient changes.
- 5 This is emphasized by spokespersons for unions. For example, Eleen and Bernardine (1971, 30), in their analyses of plant closings for the Ontario Federation of Labour, state:

Where the companies give high priority to the welfare of the workers, unions will not resist new technology. If a man's skill becomes obsolete and his company agrees to retrain him for something else, with no loss of income, it will help create greater industrial flexibility, and will allow employees to shift workers from one job to another to meet the demand of new industrial techniques.

- 6 Harris, Lewis, and Purvis (1982, 35) discuss this in the context of workers displaced through trade liberalization, and Tobin (1972) in the context of aggregate unemployment. Studies of plant closings also emphasize the difficulties of finding jobs when a large employer closes in a relatively small labour market (e.g., Dorsey 1967, 199; Gordus, Jarvey, and Ferman 1981, 81).
- 7 Even in the example of the congested expressway, workers who have to travel during rush hours may require a compensating wage (or be willing to work for less if they are allowed flexible working hours). In this case, only firms which benefit from other agglomeration externalities (e.g., reduced communication and transport costs) would locate in such situations. The negative congestion externalities would be internalized, in part at least, by subtle market-price and location decisions. Also, as Ramaswami (1983) illustrates in a formal model, when market wages respond to the job-finding rate, the unemployment rate and its underlying rates of turnover and job search are efficient.
- 8 Such a possibility arises in R. Hall's (1972) model of turnover. This inability of the private market to maintain a 'reserve army of unemployed' job-seekers is analogous to the 'overextraction' problem in the case of other community-owned resources where the absence of well-defined property rights prevents external costs from being internalized. This perspective, and its implication of a less-than-socially-optimal amount of unemployment is, of course, in contrast to the Marxian perspective of capitalism as sustaining (rather than over-extracting) the reserve army of unemployed so as to discipline the workforce. Whether or not the 'overextraction' perspective has any validity in general, however, it is unlikely to have much relevance to bailouts since troubled firms will not be searching extensively, if at all. It is more likely to have some relevance in situations, such as with megaprojects, where new projects can dominate a local labour

market, although even here the externalities are likely to be pecuniary, reflecting the attraction of labour to its most highly valued use.

- 9 An array of industrial-policy objectives that have been emphasized by individual governments and that could conflict with national industrial efficiency is discussed in Davenport (1983, 30-34) and Neufeld (1982, 20).
- 10 The evaluation of the costs of these alternatives, so as to subtract them from the full income (earnings plus valuation of leisure) of workers in their original job in order to obtain a measure of the 'benefit' of a bailout, is the subject matter of Chapters 5 and 6 in this volume.
- 11 Bailing out firms in the hope of saving on transfer payments and other public expenditures may also be considered as a 'second best' policy (to be discussed subsequently) that emanates from the political reality that displaced workers will be assisted in other ways (e.g., through unemployment insurance or health-care expenditures if necessary). The question thus becomes: which is the least costly option in the long run?
- 12 A number of these issues are also considered elsewhere in this chapter in the sections on market imperfections and failures with respect to financial and reorganization markets.
- 13 Market-adjustment costs arising from tariff reductions are emphasized in Davenport (1983, 26) and Harris, Lewis, and Purvis (1982). Davenport's simulation model suggests that it is better to subsidize the adjustment of workers than to support declining or inefficient sectors, a policy recommendation that also strongly comes across in R.E. Baldwin (1977), Harris, Lewis, and Purvis (1982), and Jenkins (1980).
- 14 Glenday and Jenkins (1981, Appendix A) and Saunders (1982) discuss this in the context of governments being able to save on the adjustment costs, as reflected in short-run wage increases, that result from unanticipated demand increases. To the extent that governments could speed up the adjustment process (perhaps even simply by providing information on the new likely equilibrium), the costly adjustments could be reduced. In these circumstances, the rationale for government intervention would depend on whether government adjustment mechanisms are less costly than private-market mechanisms such as short-run wage increases. However, if

government intervention is warranted, there is also the question of whether it should be in the form of simply providing the relevant information or whether it should assist directly in the adjustment itself. There is an additional consideration: how applicable is such intervention to 'downside' adjustments of declining sectors, where short-run wage rigidity (rather than the wage increases associated with 'upside' adjustments) appears to be the issue?

- 15 The associated unemployment is often termed involuntary. It is involuntary, of course, only if the wage inflexibility is beyond the control of the particular workers involved. As J. Baldwin (1982, 32) points out, 'adjustment costs do not cause any economic distortion when factor prices are flexible and, therefore, are not associated with any welfare loss'.
- 16 Harris, Lewis, and Purvis (1982, 30) include the loss of sector-specific capital as an element of adjustment costs when the economy is moving to a new efficient state.
- 17 For example, the application of the cobweb phenomenon to the decision to engage in lengthy training is illustrated in Saunders (1984, 14).
- 18 This is emphasized in Harris, Lewis, and Purvis (1982, 62, 63).
- 19 The benefits of a more socially desirable distribution would be equally available to all in society and the market would not automatically extract payment for these benefits; hence, one cannot be guaranteed that private-sector activities would yield sufficient redistribution. That is, there is a 'free rider' problem, in that those who would prefer to see more redistribution can benefit from the private charity of others without having to pay.
- 20 Thurow (1980), for example, argues that the biggest stumbling block against efficient economic change comes about because such change inevitably creates losers as well as winners and thereby creates legitimate distributional issues that have to be solved. See also M. Olson (1982).
- 21 In more formal terms, donors or taxpayers may not only care about the level of well-being of recipients of compensation but also about how they would normally earn their income and what they would do with it. With these concerns in mind, transfers-in-kind may well appear globally more efficient than unconditional lump-sum cash transfers. In this vein, preserving an inefficient job (through a transfer-in-kind) may seem to be more attractive than simply com-

pensating losers through the higher income of others that resulted from this efficient change. The costs of such a policy, however, must still be recognized and assessed against its benefits.

4

Economic rationales for bailouts: applications to capital markets

The previous chapter dealt with problems of market imperfections and market failures to achieve allocative efficiency and distributional equity. These issues were illustrated with respect to problems occurring in the labour market. In this chapter, we focus on the capital market, which, for the purpose of this discussion, is broken down into three separate elements. We shall first examine the financial market in which new debt and equity funds are allocated; this is a market that is not directly involved with bailouts. The second element that we shall examine is the market for the redeployment of assets in which creditors must decide whether to liquidate a firm, sell it as a going concern, or continue it, perhaps in a restructured form. Market-failure issues considered here include strategic behaviour by the owners of the debtor firms. The final element in the capital market to be discussed is the bankruptcy market; analysis of this market will consider inappropriate liquidations based on strategic behaviour among creditors.

Throughout our discussion, our interest is primarily in how these elements of the capital market are involved in the resolution of the economic status of an insolvent company.¹ The underlying economic question is whether these markets will on average correctly distinguish between those insolvent or failing firms which should be liquidated and those which are viable in the long run and should be restructured and continued in operation. If the markets are able to do this then, at the level of private benefits and costs, the markets are working properly and we must search elsewhere for explanations of bailout assistance.

There are a number of conditions that can lead to the failure of these markets and ultimately to government intervention. As the decision whether to liquidate a firm or to continue it has many of the same properties as the decision to lend money in the first instance, our analysis will consider sources of market failure in the loan market and some empirical evidence of the efficiency of this market. Other elements that can lead to market failure are significant transactions costs, the potential for opportunistic behaviour by the creditors or the insolvent debtor, and the influence of other government regulations.

Finally, market failure can occur if there is a divergence between social and private costs and benefits. These externalities are alleged to exist in foreign exchange, labour, and regional development. Since the net social benefits of restructuring are not included in the liquidation decision, it is possible that bailout assistance is necessary to prevent liquidation when these benefits are perceived to exist.

In our analysis, it will not be sufficient to argue market failure and then use this as a justification for government intervention. It is essential that the market-failure argument be sufficiently precise so that it can explain why governments intervene in some instances and not in others. Some market-failure arguments logically require that intervention is required in all insolvencies; these are not very useful in explaining the observed pattern of limited government intervention.

For programmatic assistance, companies must fall within a certain general set of industries. For example, the Enterprise Development Program (EDP) of the federal government specializes in manufacturing firms with some incursions into the service industry. These constraints are also found in the programs of the Ontario Development Corporation (ODC). However, even if the firms fit within the applicable industry, what is the form of market failure that justifies government intervention? As for *ad hoc* bailout assistance, there are many companies that enter into receivership and ultimately are saved through a voluntary workout. What is unique, then, about the *ad hoc* cases that necessitates government intervention?

The concept of optimum resource allocation is predicated on redeployment of resources within the economy. Underlying this concept is the idea of opportunity cost, which can be defined as that expected profit (or rate of return) that just compensates owners of resources for their expected risk as they perceive it. In our discussions, opportunity costs are identified with economic profits and not accounting profits; the latter do

not reflect opportunity costs but rather historical values of investments and operating costs. In a well-functioning set of markets, redeployment occurs so that resources tend to move from firms for which expected long-run profits, given the level of risk (i.e., risk-adjusted economic profits), are less than economic profits to firms for which the expected risk-adjusted profits are in excess of economic profits. This process ensures the maximum output for a given set of input resources.

Redeployment requires ease of entry into industries that are currently earning, or are anticipated to earn, expected profits in excess of their economic profits, and ease of exit from industries in which the converse relationship holds. Entries and exits are facilitated by the absence of transactions costs. To the extent that such costs exist, resource allocation is affected. If the transactions costs are inherent in the system and are at an irreducible level, the resulting resource allocation is the best that can be obtained. However, barriers created by governments or participants in the markets will still create problems; their removal would improve resource allocation (Dahlman 1979). To the extent that takeover legislation makes it very costly to engage in takeover attempts, for example, there will be a barrier to the redeployment of resources. Of course, in some circumstances a negative impact on resource allocation could also arise due to an increase of concentration and perhaps the generation of monopoly power; such problems, however, are not likely to be serious in the case of a takeover of a company in financial distress.

FINANCIAL CAPITAL-MARKET FAILURES: AN OVERVIEW

In considering the initial financing of assets, the financial capital market facilitates the issuance to investors of claims against the future earnings of a firm. These claims are risky, since the underlying earnings stream has variability. Each of the financial instruments issued by the firm is priced so that the resulting yield on the security reflects the risk as perceived by the holder of the security. The funds so obtained from the issue of the financial instruments are then used to purchase the inputs needed for the provision of the firm's final output. Here, a properly functioning market is essential if financial resources are to be directed to their most productive uses. We know that a financial capital market is functioning properly or efficiently if the prices of the securities reflect, immediately and in an unbiased manner, all information about a particular firm and the economy as it affects the firm. The efficiency of the

market is also assisted by transactions costs that reflect natural and not induced influences and hence are at an irreducible level. Moreover, a well-functioning capital market will facilitate the exit of financial capital from firms when this is the efficient solution.

In a world in which there are uncertain earnings due to cyclical variations or where technological shocks can affect the earnings stream, there is bound to be insolvency for some firms. In an efficient capital market, there will be no barriers to the liquidation of these firms through receiverships or through the Bankruptcy Act, or, alternatively, to the continuation of the firm in a reorganized form through voluntary 'work-outs' among the creditors or through proposals for reorganization under the provisions of the Bankruptcy Act. Firms that are not viable in the long run will be liquidated; the creditors will obtain their respective shares of the liquidation value and invest the funds where they expect to earn higher risk-adjusted returns. Alternatively, firms that are viable in the long run, i.e., their insolvency is transitory, will on average be continued with an altered financial and/or managerial structure.

To put the case more formally, the overall earnings of a firm in any period can be visualized as the outcome of a drawing from a probability distribution. The distribution has a mean or expected value and a measure of variability or risk.² The drawings in any period will deviate from the mean value for a number of reasons, including, for example, an economy that is more (or less) buoyant than expected. It is the actual earnings in any year that provide the payments to cover the debt obligations. If the firm has a particularly bad outcome and the result is insolvency, but if the expected value of earnings is unchanged, the firm should be able to issue new debt to meet the current obligations or to get existing debt holders to modify their claims.

If the observed earnings reflect not a transitory but a permanent change in the expected value of the firm's earnings, then there is a permanent shift in the underlying probability distribution. This could occur, for example, because of a change in technology or a new entrant into the industry. To the extent that the new expected level of earnings results in a firm's insolvency, a more serious restructuring of claims is required. In fact, if the average level of earnings has fallen enough, more radical steps such as liquidation may be warranted.

To the extent that a liquidation does not occur when that is the correct decision, resources will be used inefficiently; the economy would be better off if the resources flowed to another use. Similarly, if a liquida-

tion occurs when it is not the correct decision, resources will be wasted. This second result could occur if the creditors are precipitous in demanding payment on their outstanding claims or if they cannot agree on a plan of reorganization or going-concern sale.

THE MARKET FOR REDEPLOYMENT OF ASSETS: DESCRIPTION

In order to analyse the bailout phenomenon, it is essential that the market for the redeployment of assets of insolvent companies be described in some detail. A number of the issues that are used to justify government intervention in this market can best be understood after an appreciation of the mechanics of this market. The redeployment of capital, both financial and physical, can be accomplished in a number of ways. These include actions under the Bankruptcy Act – from liquidation of assets and the payment of a dividend to creditors based on the priority of distribution as found in the Bankruptcy Act to a proposal to rehabilitate the insolvent company. Alternatively, a receivership may be considered; this is typically initiated by a secured creditor either through a court order upon default or by a private appointment under a contractual provision, and can lead to a liquidation, a sale as a going concern, or a voluntary reorganization (also called a workout) in which existing creditors make some accommodation in their claims so as to continue the firm. The reorganization proceeds outside the provisions of the Bankruptcy Act. A receiver is often appointed if there is apprehension about the safety of the assets. Receivers that are court-appointed take possession of the premises and operate the business; those appointed under a contractual provision have duties that are primarily to the holders of the security agreement making the appointment.

Mergers or takeovers are alternative mechanisms in which the insolvent or floundering firm can be rehabilitated outside of the costly bankruptcy or receivership procedures. The merger/takeover route and any institutional or political problems that may affect the efficient operation of this alternative are discussed later in the chapter.

Reasons for insolvency

Insolvency can arise from a number of sources. Most research in this area suggests that the major cause of insolvency is managerial incompetence (see Argenter 1976; McKinley 1979; B.R. Wilson 1979; and Kryzanowski and Holland 1982). Other reasons, such as poor marketing,

insufficient financial expertise, high interest rates, the state of the economy, and declining markets, are seen as of secondary importance. However, managerial incompetence covers a multitude of sins and may reflect a combination of factors contributing to the insolvency. For example, it may be unfair to place the entire blame for an insolvency on management when the combination of a high ratio of debt to assets, unexpectedly high interest rates, and a depressed economy also played a part in the insolvency. Hindsight is perfect on whether management may have accepted too much risk – but *ex ante* the decision may have been a reasonable one.

The causes of the insolvency provide strong indications of whether the firms should be liquidated or reorganized. Transitory influences that can be corrected (e.g., poor management) or that will be reversed (e.g., peak interest rates) will usually lead to a reorganization in some form provided that firm is basically viable. However, the decision to reorganize must include an evaluation of the viability of the restructured firm, including the transactions costs that will be incurred in the reorganization itself. Permanent changes affecting the long-run viability of the company will usually lead to liquidations unless the firm is bailed out.

Finally, the conclusions concerning the significance of corporate mismanagement may be somewhat overstated. By far the largest number of bankruptcies occur for small firms³ which are typically sole proprietorships lacking expertise in support areas such as marketing and finance, and whose debt is collateralized by personal guarantees. In addition, these firms usually have higher ratios of debt to total assets than do larger firms and thus are more susceptible to a decline in economic activity. Finally, small firms present higher risks to lending institutions in terms of the potential for opportunistic behaviour as the firm slides toward insolvency. For example, owners/managers can remove collateral, both personal and corporate, dissipate assets, etc., for their direct benefit and for a direct loss to lending institutions. This may be one element in the explanation of what is viewed as precipitous behaviour on the part of banks concerning liquidations of insolvent companies.

The problems identified above for small firms are not as serious for larger companies. Professional management is usually separated from the equity holders (owners) and the former may not gain personally from opportunistic behaviour that shifts wealth from creditors to equity holders. This distinction between large and small corporations thus will arise frequently throughout this chapter. In fact, Meckling (1977) has

suggested that small corporate bankruptcies should be classed with personal bankruptcies since they have strong similarities.

Characteristics of bankrupt companies

Research in the area of bankruptcy has been surprisingly slow to develop. In 1968 an article (Altman 1968) began a literature which identifies the characteristics of failed firms and derives statistical models to predict financial failure. These models have since been made more statistically sophisticated and have been applied to many countries (Altman 1984) including Canada (Altman and Lavalee 1980).

It is only recently that indepth empirical analyses of the characteristics of bankrupt companies have been undertaken in Canada. Although data can be found in the *Insolvency Bulletin*, they are not presented in a highly disaggregated format. In this chapter, some empirical evidence on liquidations will be presented; information on companies that are subject to a proposal under the Bankruptcy Act will be analysed in Chapter 8.

Kryzanowski and Holland (1982) present evidence on seventy-six Canadian bankruptcies that were in process during 1976. Since the process takes in excess of two years to be completed, the companies in the sample could have entered bankruptcy proceedings as early as the end of 1974. Of the seventy-six companies, approximately 50 per cent were unincorporated businesses; results are presented for the aggregate sample. Since the bailout phenomenon is more relevant to large incorporated businesses, the results of this study may be of limited relevance.

Considering first the age of the firms that were bankrupt, approximately 41 per cent were less than two years old; 31 per cent had been in existence for more than five years. In terms of profitability, 49 per cent of the sample for which data were available had never been profitable during their existence and 15 per cent had not been profitable during the previous two years. The surprisingly high percentage of firms that had never been profitable simply may reflect the large percentage of bankrupt firms that had been in existence for less than two years.

Table 4 indicates the sizes of companies that were bankrupt and the potential losses to creditors. Clearly, a large proportion of the bankrupt firms were quite small, having less than \$10,000 in assets in 1976. In addition, the ratio of estimated assets to declared liabilities is shown to increase with the size of the company. Thus, the probability of creditors

TABLE 4

Estimated assets and ratio to declared liabilities for a sample of bankrupt business, 1976

Estimated assets	Number	(%)	Ratio of estimated assets to declared liabilities
\$0 - 1000	13	(19)	0.041
1001 - 5000	23	(33)	0.140
5001 - 10000	13	(19)	0.272
10001 - 25000	4	(6)	0.345
25001 - 50000	4	(6)	0.500
50001 - 100000	7	(10)	0.427
over \$100000	6	(8)	0.687

SOURCE: Kryzanowski and Holland (1982), Table 2.

TABLE 5

Administrative costs and realized value, 1976

Realized value	Number of businesses (%)	Total administrative costs as a percentage of realized value
\$0 - 1000	22 (37)	94.8
1001 - 2000	9 (15)	93.2
2001 - 5000	15 (25)	78.6
over \$5000	13 (22)	71.6

SOURCE: Kryzanowski and Holland (1982).

receiving no payoff in the event of a liquidation appears to increase dramatically for smaller debtors.

The study also considers the importance of administrative costs: these include the sum of trustee and legal fees as well as other administrative costs. In some bankruptcies, the debtor must use personal funds to pay for incurred administrative costs not covered by the realized value of the assets.

The impact of administrative costs is presented in Table 5. One striking feature of Table 5 is the small dollar value of realized value on assets. The average realized value for the sample was \$4,329 and there were a large number of cases in which realized values were very small. Costs as a percentage of realized values are shown to decline with the

size of the estate; this reflects some fixed-cost aspects of the administrative and trustee fees.

Kryzanowski and Holland also identify the payouts to creditors, although no information was available for secured creditors. For those cases in which there were preferred creditors, no payments were made in 51 per cent of the bankruptcies, and on average \$1,275 (a 53 per cent payout relative to realized value) was paid in those bankruptcies for which there was a preferred payout. Unsecured creditors, as expected, fared much worse, receiving no payment in 80 per cent of the bankruptcies. For those cases in which a payment was made it was on average \$2,506 (a 7.3 per cent payout).

Bankruptcy information for the period 1977 through July 1983 was obtained by the authors of the present study from the federal Superintendent of Insurance, but the data tape we received did not provide as much firm- and bankruptcy-specific data as is obtained in the Kryzanowski and Holland sample. Also, only bankruptcies of incorporated entities were identified and analysed; and even though the firms were incorporated, they could be very small (e.g., sole-proprietorship consulting operations or personal-service corporations).

The number of bankruptcies of incorporated entities and the number of proposals for each of the sample years from 1977 through 1983 is presented in Table 6. Clearly, there were very few successful proposals under the Bankruptcy Act; in addition, the number of bankruptcies rose dramatically over the period, reaching a peak during 1982.

The assets of bankrupt firms are presented in Table 7; the results are broadly consistent with those of the Kryzanowski and Holland study. The striking features are the lack of bankruptcies of large firms (for assets in excess of \$100,000, the proportions range from a high of 0.14 in 1982 to a low of 0.09 in 1981) and the large proportion of small-firm bankruptcies (e.g., under \$10,001, the proportion is in a narrow range of 0.44 to 0.53). Finally, there seems to have been a secular increase in the proportion of bankruptcies in the \$50,001 to \$100,000 range and a corresponding decrease in the \$10,001 to \$50,000 range.

The important aspect for the creditors in a bankruptcy is the amount they receive. Information on the gross dividends (the payout in the event of liquidation) paid to creditors is presented in Table 8, which confirms that a liquidation is not a very happy event for creditors. The largest proportion of dividends are in the \$0 to \$1,000 classification and a remarkably high proportion of bankruptcies resulted in a zero payout. The

TABLE 6

Number of proposals and bankruptcies: incorporated businesses, 1977-83

	Proposals	Bankruptcies
1977	6	103
1978	18	340
1979	14	441
1980	41	730
1981	25	650
1982	12	1045
1983 (up to 1 August 1983)	8	680

SOURCE: Tabulations from data tapes from the federal Superintendent of Insurance (Ottawa).

other noteworthy feature is the secular increase in both the proportion of dividends in the lowest category and in those with a zero payout. This observation reflects the growing value of liabilities of firms when they go bankrupt, perhaps because they have been allowed to continue in operation too long and also because there are low recoveries on assets in a recessionary economy.

Unfortunately, this data does not present the total picture since we did not include those firms that may have liquidated outside of the Bankruptcy Act. Such data is not to our knowledge available.

The following discussion will consider this financial-distress process from the point of view of a secured creditor, say, a chartered bank that had extended either a term loan or a working-capital loan. Any differences in outcomes that would arise had the creditor not been secured will be noted.

Mechanics of the loan market

The potential borrower approaches the bank and provides financial statements concerning the historical cash flow of the firm and pro forma statements which would include the impact of the granting of a loan.⁴ The financial institution then evaluates the possible payoffs from the loan, their probabilities of occurring, and requirements for security, which may include (but not frequently) a pledge of shares of the firm, the cash-surrender value of manager/owner's life-insurance policy, third-party guarantees, and specific assets. The interaction of the payoffs,

TABLE 7

Assets as reported by debtor bankrupts

	1977		1978		1979		1980		1981		1982		1983 (to 1 Aug)	
	#	prop.	#	prop.	#	prop.	#	prop.	#	prop.	#	prop.	#	prop.
\$0 - 1,000	29	0.28	92	0.27	100	0.23	148	0.20	136	0.21	196	0.19	107	0.18
1,001-10,000	22	0.21	79	0.23	111	0.25	214	0.29	192	0.30	263	0.25	212	0.35
10,001-50,000	32	0.31	82	0.24	128	0.29	196	0.27	168	0.26	219	0.21	143	0.24
50,001-100,000	9	0.09	48	0.14	65	0.15	97	0.13	93	0.14	225	0.22	128	0.21
100,001-200,000	5	0.05	21	0.06	21	0.05	42	0.06	36	0.06	89	0.09	59	0.10
200,001-400,000	5	0.05	8	0.02	8	0.02	17	0.02	14	0.02	29	0.03	11	0.02
400,001-1,000,000	1	0.01	6	0.02	3	0.01	12	0.02	6	0.01	19	0.02	2	a
1,000,001-2,000,000	0	-	3	0.02	4	0.01	1	a	3	a	2	a	2	a
greater than 2,000,000	0	-	1	0.01	1	a	3	a	2	a	3	a	3	a
TOTAL	103	1.00	340	1.01	441	1.01	730	0.99	650	1.00	1045	1.01	608	1.00

a Proportion less than .0051

SOURCE: Tabulations from data tapes from the federal Superintendent of Insurance (Ottawa)

TABLE 8
Gross dividends paid in bankruptcies

	1977		1978		1979		1980		1981		1982		1983 (to 1 Aug)	
	#	prop.	#	prop.	#	prop.	#	prop.	#	prop.	#	prop.	#	prop.
\$0-1,000	72	0.70	244	0.72	312	0.71	558	0.76	562	0.86	1021	0.98	608	1.00
1,001-10,000	27	0.26	72	0.21	94	0.21	136	0.19	75	0.12	19	0.02	0	-
10,001-50,000	3	0.03	18	0.05	32	0.07	32	0.04	7	0.01	5	-	-	-
50,001-100,000	1	0.01	5	0.01	1	-	2	-	3	-	0	-	0	-
100,001-200,000	0	-	1	-	1	-	0	-	2	-	0	-	0	-
200,001-400,000	0	-	0	-	1	-	0	-	0	-	0	-	0	-
400,001-1,000,000	0	-	0	-	-	0.0	-	0.0	-	0.0	-	0.0	-	0.0
1,000,001-2,000,000	0	-	0	-	0	-	1	-	0	-	0	-	0	-
greater than 2,000,000	0	-	0	-	0	-	1	-	0	-	0	-	0	-
Zero payments	0.53		0.58		0.57		0.65		0.74		0.97		1.00	

SOURCE: Tabulations from data tapes from the federal Superintendent of Insurance (Ottawa)

their probabilities, and the security jointly determine the risk exposure of the financial institution; this ultimately determines the interest rate charged on the loan.

To assist in understanding the process of interest-rate determination, a simplified example is presented. Consider an economy in which all market participants are risk-neutral and the riskless rate of interest is 10 per cent. A borrower approaches the financial institution for a loan that would be repayable at the end of one year with interest. For the firm, there are two equally likely outcomes that could occur at the end of the year; the first would generate cash flows of \$1,300 and the second \$900. The firm has promised to repay \$1,100. What is the value of this loan today? This can be calculated by finding the present value of the expected cash flows to the lender; this value in turn can be calculated using a discount rate of 10 per cent, which is the expected rate of return that these risk-neutral investors require.

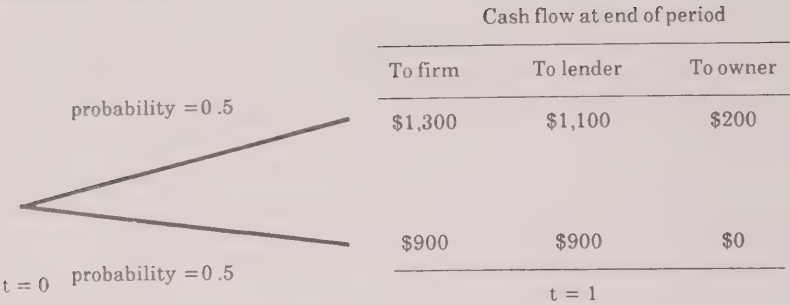
The cash-flow patterns to the investors in this firm are portrayed in Figure 1. The market value of the loan is \$909⁵; this is the amount of funds that will be lent to the firm. However, the loan is usually stated in terms of promised payments; in other words, the firm promises to repay \$1,100 on a \$909 loan. This results in a promised rate of interest of 21 per cent. The promised rate of interest is in excess of the expected rate of interest of 10 per cent so that over the long run the financial institution, by making a number of these risky loans, can earn the expected rate of return. If personal guarantees can increase the payment to \$1,100 in the poorer state, then the promised and expected interest rates would be the same. To the extent that liquidation costs, trustee fees, or receivers' fees would have to be paid out of the proceeds of the estate if bankruptcy occurs, the promised rate would be higher to cover these expected costs. Thus, the bank would attempt to protect itself, *ex ante*, by requiring a higher promised rate of interest.

The promised interest rate can be broken down into three components:

$$R_p = R_f + \text{risk premium} + \text{default premium},$$

where R_p is the promised rate and R_f is the riskless rate in nominal terms. The Canadian government's bond rate is an estimate of this latter quantity. The risk premium reflects the marginal risk aversion in the market given the risk of the loan, and the default premium covers the payoffs in cases where cash flows are less than promised. In our example

FIGURE 1
Cash-flow consequences of loan



the risk premium is zero, since the investors are assumed to be risk-neutral. If they were risk-averse the risk premium would be positive.

The financial institutions add another component to the promised rate to cover the costs of marketing, screening, negotiating, administering, collecting, monitoring, and counseling. Since some of these costs are fixed and independent of the size of the loan, the promised rate on loans to small firms will be much higher than the promised rates on loans to large firms, even if their risks are identical. However, many financial institutions are now removing these costs from the promised rate and are charging borrowers a separate administrative fee.⁶

In addition to incorporating the probability of insolvency and the cash flows associated with various outcomes, the financial institution will also recognize that in the event of insolvency it has a choice as to what to do: it could either enforce its security and liquidate the firm or participate in a reorganization. This option to make another decision in the future based on new information available at that time has value and should be reflected in the promised interest rate at the date when the loan is made.

Finally, if there is a potential for opportunistic behaviour by debtors when insolvency is a prospect, the financial institution will attempt to constrain this behaviour by adding provisions for the loan agreement that circumscribe the firm's investment and dividend decisions. Since these provisions would require costly monitoring, the promised rate will have to reflect these costs. This cost is ultimately borne by the owners of the debtor firm.⁷

Assume that over the year after the loan is granted the economy slows down, the loan is in default (i.e., the state of economy is such that the cash flow of the firm is \$900 and insufficient to make the promised payment of \$1,100), and the financial institution must now consider its options. By this time a receiver may be appointed to protect the assets of the secured creditor. The owner of the debtor firm presents a proposal to restructure the claims. The financial institution has to decide whether it should realize its security, and take the funds to lend elsewhere, or participate in the restructuring, and scale down its claims or convert some of them into another form of financial instrument such as income bonds, common stock, or options.⁸ If a restructuring is accepted, there still would be risks of a subsequent insolvency and potential problems concerning the dissipation of assets unless a receiver remains in the firm, both of which would force the bank to incur monitoring and enforcement costs.

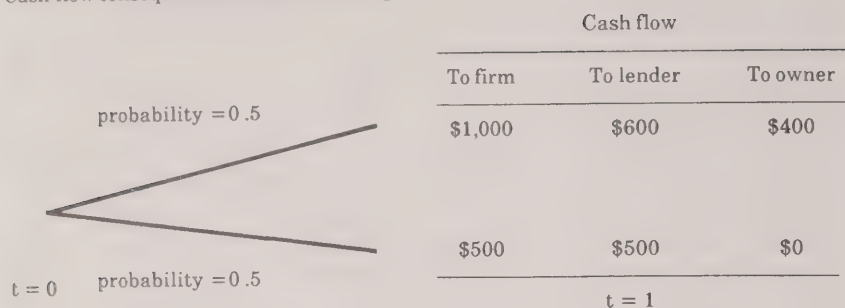
At a conceptual level, the financial institution's decision rule is to liquidate when the liquidation value (after all expenses) exceeds the market value of the financial institution's claim to the expected future cash flows from the restructured entity. This rule assumes that there are no indirect costs to the bank from a liquidation; costs, for example, that could arise from the signal that a liquidation might present about the judgement of the bank in granting the loan in the first place. If such costs do exist, there will be a bias toward continuing the firm despite this move not being the best solution from a resource-allocation perspective. This assumption is not unreasonable, since it is expected that even with the best analyses mistakes can and do occur.

An equivalent rule is to have restructuring occur when the market value of the firm (i.e., the present value of all expected future cash flows) exceeds the liquidation value. In order to make this evaluation, the financial institution must apply a market-determined discount rate to the forecasted cash-flow figures that would reflect the risk of the cash flows. As long as there is no upper limit on the risk that the financial institution is willing to accept on any loan (or continuation of an insolvent company), the decision taken will always maximize the value of its claim. If there is a constraint on the risk level, then to liquidate may be the only decision accepted.

As an example, consider the firm in default that is represented in Figure 2. The owner has presented a proposal in which there are two equally probable cash-flow outcomes if the firm is continued – \$1,000 and

FIGURE 2

Cash-flow consequences of a restructuring



\$500. The expected value of the firm is \$681.82.⁹ If the liquidation value of the firm is \$900, as expected when the loan was initially granted, the decision is obvious: liquidate. However, suppose that the liquidation value turned out to be \$500. There is now the potential for a successful refinancing. The owner could offer the financial institution a restructuring where the market value of the restructured debt claim is no less than \$500. In fact, the minimum-payoff pattern for cash flows to the lender would be \$600 in the good state and \$500 in the poor state. These payoffs are also presented in Figure 2.

With the restructured debt, the market value today of the debt is \$500 and, based on the promise to pay \$600, the promised rate of return is 20 per cent. Of course, there is room for negotiation, since the owner of the debtor firm will receive nothing if the firm is liquidated. Under the example presented, the owner would receive \$400 in the successful state, and the market value of his claim is \$182.

The decision by the financial institution to liquidate or to restructure its claims has many of the same elements as the original decision to lend funds to the firm. A decision to restructure its claims is equivalent to lending the liquidation value to the firm in exchange for a promise to pay future cash flows. Therefore, some of the problems found in the inefficient functioning of the loan market may be applicable to the market in which claims are restructured.

*Proposals*¹⁰

Proposals under the Bankruptcy Act are not a common event. Out of 6,000 business bankruptcies in 1980, there were approximately 400 proposals (B.R. Wilson, 1981, 1). The question of why there are so few proposals is addressed later in the chapter.

Proposals can be of four general types: holding, liquidating, cash settlement, and basket proposals. Until the proposal is rejected with a resulting bankruptcy, the insolvent debtor continues to own the assets. This can present problems concerned with the dissipation of assets. Often, an interim receiver is appointed to protect the assets.

A holding proposal involves a promise to provide a proposal by a certain date. This mechanism obtains time for the debtor, and an interim receiver is usually appointed to protect the assets. A liquidating proposal provides for the orderly liquidation of a company's assets over a set period of time. It differs from a liquidation under bankruptcy in that the liquidation process is controlled by the insolvent debtor and not a trustee. A cash-settlement proposal usually provides for a cash payment for a given percentage of the proven claims of creditors.¹¹ Finally, a basket proposal provides for a lump sum offered to creditors, the distribution of which is governed by the creditor's priorities under the Bankruptcy Act.

Our concern is with proposals in the last two categories, since these require decisions by creditors on the long-run viability of the firm, the structure of the revised claims, and the value obtained under immediate or phased-in liquidation.

The proposal itself can take one of three forms: a 'composition', in which the creditor is paid either a stated number of cents on each dollar of a proven claim or a lump sum; an 'extension' (of time), under which the debtor pays the creditor over a longer period of time than originally envisaged in the loan; or an 'arrangement', which covers a variety of restructuring plans including those in which a trustee keeps control of the debtor's assets.

Under the first two options, if the proposal is accepted and approved by the court, the debtor continues to run the business and the trustee collects funds from the debtor to disburse to the creditors in amounts dictated by the terms of the proposal. It may be in the best interests of a debtor to request that an interim receiver be appointed to assist in running the business; this would be of particular benefit in those

instances where creditors are worried about the dissipation of the assets of the firm during the life of the proposal.

A brief description of the sequence of events in a proposal is useful. The first step is the filing by a debtor of a proposal at the appropriate office of the Superintendent of Bankruptcy. The filing results in a stay of proceedings against unsecured creditors, even if they have not had the opportunity to read the proposal. However, there is no stay for secured creditors, who most likely have taken possession of the security through a receiver. Upon the appointment of a trustee, the date of the creditors' meeting is determined. The trustee has a number of important functions. These include calling the creditors' meeting, circulating proposals, and preparing a report on the debtor company that describes why the firm got into trouble and also why the proposal is viable. A typical trustee's report would include discussions of the following issues: historical background of the firm; its financial position; cause of financial difficulties; conduct of debtor; evaluation of assets including the liquidation value; difference between declared liabilities and claims produced for payment; recommendation of trustee.

However, the most important function performed by the trustee is that of working with the debtor and secured creditors on the proposal. The agreement of the secured creditors to the proposal is crucial, since they can demand payment of their security and thereby thwart any attempt to continue the firm. The secured creditors cannot be bound to the terms of the proposal without their agreement. In some cases, however, there may be a separate agreement with secured creditors that is outside of the proposal. Thus, if the proposal does reach the creditors' meeting, the secured creditors by this time are usually satisfied and it is only the unsecured and preferred creditors who still must decide on it.

The creditors, in accordance with the provisions in the Act, then vote on the proposal. If it is rejected, there is an immediate petition into bankruptcy. If accepted, it is presented to the court for approval. Amendments to the proposal can be put forward at the creditors' meeting, but some – e.g., an amendment that lowers the value of the unsecured creditors' claims – may require the adjournment of the meeting and its rescheduling.

The final stage is court approval. Here, the role of the court is to safeguard the interests of creditors. The court will refuse a creditor-accepted proposal under the following conditions:

- if the creditors are better off in bankruptcy (i.e., liquidation) than under the proposal
- if the proposal does not provide for the payment of preferred claims before payment to unsecured creditors and payment in full of all fees and expenses of the trustee
- if the conduct of the debtor before the proposal was not satisfactory with respect to the requirements of commercial morality. (See *'In re The Man with the Axe Limited* [1961], 2 C.B.R. [N.S.], 8).

A number of important observations should be made with respect to the proposal procedure. First, it is a time-consuming and costly experience. Second, a major part of the expense of it is associated with attempts by creditors to protect their interests from questionable behaviour by the insolvent debtor. Third, major restructuring arrangements may require the issuance of income debentures, term preferred shares, or some form of equity participation. These issues will produce administrative costs (e.g., costs of clearances from securities commissions) that must be recovered from the assets of the estate. In complicated proposals, these costs could be very high.

Can we conclude from the small number of proposals under the Bankruptcy Act that the market for the redeployment of assets is not working well? Further, since small firms dominate in the numbers of bankruptcies, is the small number of these proposals an indication that they are not a viable option for most small firms? The costs of undertaking the proposal procedures are high and costly monitoring is important, since there is the potential for opportunistic behaviour by the debtor who, under some proposals, still runs the business. Since management is often the major cause of bankruptcy, a change in management may be required; this cannot be accomplished instantaneously and without search costs. Finally, the small firm cannot use the enticement of equity participation as part of the payment to creditors to 'sweeten' the proposal, since its equity is nonmarketable and there is also no great incentive to become a minority shareholder in a company in which the owner/ manager is a major shareholder. Under this latter scenario, the manager could consume prerequisites and divert assets to their use, thereby receiving benefits but incurring only a portion of the costs.¹² Therefore, in small firms the costs incurred in implementing a proposal may be sufficiently large to make liquidation an economically preferred strategy.

In many instances a receivership occurs and a restructuring proposal, called a voluntary workout, arises outside of the Bankruptcy Act. For large firms, receiverships tend to occur much more frequently than arrangements under the Bankruptcy Act. After being appointed, the receiver must assess whether the business should be continued or not. If it should continue, the receiver must then determine whether the company should be reorganized or run for a short time and then be liquidated. If a restructuring is the appropriate strategy, the receiver must negotiate with representatives of the other classes of claimants. The proposals may be very complicated and incorporate financial instruments and equity participation. Debtors with good prospects for the future but little in the way of current assets are the ones more likely to have restructuring proposals that use equity participation or long-term payments.

THE MARKET FOR REDEPLOYMENT OF ASSETS: POSSIBLE FAILURES

A number of studies have identified the potential sources of market failure; some of these have been considered in Chapter 3. In this section, a description and evaluation of these sources as they relate to the market for the redeployment of assets will be presented. In addition, if government intervention appears warranted, the source of the market failure will be analysed to determine if it can explain why only some and not all troubled companies obtain bailout assistance. The market-failure arguments considered include transactions costs, moral hazard, adverse selection, other government regulations, unreasonably high discount rates, uncertainty and diversification of risk, externalities, and monopoly power of financial institutions.

Unfortunately, there is little direct evidence available on the issue of financial-market failures in bankruptcy. However, in the previous section, similarities were identified between the loan market in which new funds are allocated to competing demanders and the market for the redeployment of assets in which a reinvestment or disinvestment decision is made. Given this similarity in principle, the empirical evidence on the functioning of the loan market may shed some light on, or at least provide a benchmark for, the market for the redeployment of assets. Therefore, before analysing the market-failure arguments, we will summarize the empirical evidence on the loan market.

Loan markets

There have been three recent studies on the functioning of the loan market. The Economic Council of Canada (ECC) prepared a study entitled *Intervention and Efficiency* (ECC 1982) dealing with government intervention in financial markets. This study considers the markets for longer-term financial instruments and addresses the problems of market failure and the concept of a 'credit gap'. This latter term is difficult to define, but the ECC uses the concept to identify a situation 'characterized by a differentiated shortage of financial capital caused by market imperfections – that is, a shortage that affects differently those participants in the economy who face similar risks and expected returns' (ibid.,12). In addition, the credit gap may not affect the quantity of funds available but rather the terms under which the credit is made available to participants who are identical in terms of risk and expected profitability.

Two other studies look at two different sources of financing for small business. The first (Wynant et al. 1982) is concerned with chartered-bank financing and the second (Facsym Research Ltd. 1981) with non-bank financial institutions. The distinction between small and large businesses turns out to have some important implications not only in the markets analysed in these studies but also in the market for redeployment of assets.

The ECC study concludes that whereas there may have been gaps in term lending in the past that necessitated government intervention, these have given way to problems of equity financing for small and medium-sized firms. This is not to state that there are no problems in raising debt capital. The study notes that there may be 'occasional problems caused by inadequate competition or the small size of Canada's financial market, particularly for financing small and medium sized firms or firms located in distant regions' (ECC 1982, 27). In addition, the differences in interest rates charged on loans to small versus large firms need not constitute a credit gap, but may be the result of differences in transactions and search costs.

The studies of small-business financing arrive at similar conclusions. The study of chartered-bank financing concludes that

banks treat small businesses as equitably as they do larger businesses. . . . Two major differences that can possibly be considered as unfavourable to small business are higher interest rates paid

on loans and the banks' greater insistence for personal guarantees and personal collateral from the principals in a small firm. (Wynant et al. 1982, 8)

The authors of the study argue that the first observation is due to higher transactions costs and risks. The collateral difference is consistent with the fundamental importance of the owner/operator in the success of the firm and the observed shrinkage in collateral values if the loan defaults and the assets are liquidated (see Halpern et al. 1980).

The Facsym report on nonbank financial institutions also discovers no general problems for small firms in obtaining loans. These conclusions are obtained from a questionnaire study. The results may have a significant survivorship bias since only surviving firms, and hence ones that have had a better experience in terms of obtaining funds from financial institutions, participated in the questionnaire. Borrowers said they tended to reject financing offers by financial institutions for a number of reasons, including interest rates and requirements for substantial collateral, rapid repayment, restrictive covenants, and personal guarantees. For larger firms, however, the last three reasons were not important.

The Facsym study concludes that the financial market is working well, and that the major problem in obtaining funds for small firms is the absence of a financial manager who can plan a financial strategy. In fact, one recommendation of the study is to use government assistance to improve the quality of financial management of the small enterprise (this is now done through the Federal Business Development Bank's consulting services). One goal of the assistance should be to separate entrepreneurial financial decision-making.

The study adds that companies that have problems raising funds tend to be small, rapidly growing with little collateral, high-risk with fixed assets that are very sector-specific so that they have little resale value, with neither the firm nor the entrepreneur having a 'track record'. Based on these characteristics, it is not surprising that these firms have some problem in obtaining capital. It is not obvious, moreover, that in an efficiently functioning market these firms should obtain funding.

To summarize, all three studies indicate that the financial market is working well, even though not every firm obtains financing equal to their requests or on terms that they consider adequate. Any problems in these markets tend to occur for small firms that have little collateral.

Without collateral, the financial institutions perceive their risk exposure to be too high.

We now return to the market for the redeployment of assets to determine whether or not it is operating as well as the financial markets.

Transactions costs

As noted earlier, transactions costs in a bankruptcy can be substantial. The obvious costs, the legal and trustee or receiver's fees and out-of-pocket expenses, reflect the costs of monitoring the operations of the insolvent firm as soon as it is placed into receivership or bankruptcy and the continued costs of monitoring if the firm is not liquidated but restructured in some way.

The impact of transactions costs on the functioning of the market for the redeployment of assets will depend upon the value of the assets of the insolvent company. Considering a small firm, the secured creditor can anticipate that the monitoring and other costs will consume a substantial part of the assets. To minimize this loss, the secured creditor may call the loan very quickly and liquidate the company. If the company is larger, the transactions costs as a proportion of the assets will be smaller and will not be as prominent in the liquidation/restructuring decision. As Dahlman (1979) points out, if these transactions costs are part of the natural environment, then they cannot be considered a source of market failure. It is thus incorrect to use the zero-transactions-cost model and its implications for resource allocation to invoke market failure in an economy where transactions costs cannot be eliminated. A market failure would exist and government intervention would be justified only if the transactions costs that the government, if it somehow maintains a company in operation, must also incur in its monitoring are lower than in the private market. In this case, the government intervention would economize on transactions costs. However, since private markets are set up for this type of monitoring and governments are not, it is unlikely that the government's transactions costs would be less than those of the private market.

Moral hazard

Moral hazard is a frequent problem in markets in which there is uncertainty and where the outcome depends in part upon the actions of

the participants in the market. The most frequent example of the moral-hazard problem is found in the insurance industry.

Using a fire-insurance example, an insurance company evaluates the structure being insured, the probability of fire, the expected losses, and then sets a premium. Once the insurance policy is in force, the insured no longer has an incentive to take reasonable care of the structure, since in the event of fire there will be full compensation. To the extent that reasonable care is not taken, the probability of a fire occurring may actually increase. The behaviour of the insured thus increases the probability that the insured event will occur. If a contract could be written so that a payoff would be contingent on the good behaviour of the insured, the moral-hazard problem would not exist. However, costly monitoring would be required to enforce this contract; in addition, it would be very costly to construct this contract. This leads to thoughts of other solutions such as paying only a predetermined proportion of the loss; the fact that the insured would bear some portion of the loss may alter behaviour.

In this section we investigate three general areas in which moral-hazard behaviour by the firm (as represented by the equity holders) can lead to a market failure.

Loan markets

The moral-hazard problem arises in the loan market through the limited-liability provision of the shareholder's investment. Since the equity investor has limited liability, the bondholder only as a maximum can receive the promised rate. If earnings are positive but less than the promised rate, the bondholder will receive the full amount of the earnings. If the bond is in default, however, limited liability protects the equity investors against having to make up the deficiency in the promised payment out of their own funds; limited liability thus implies that the worst consequence to a shareholder in a bankruptcy is a zero payment, i.e., a loss of the original investment. This is equivalent to the bondholders providing the equity holder with an insurance policy so that in the event of default the equity holder need not make the promised payment (on this, see Halpern et al. 1980).

Since the equivalent of an insurance policy is involved, the moral-hazard problem becomes important and will be anticipated by bondholders/insurers at the time when the loan is made. Specifically,

lenders will be cognizant that, when the firm is approaching bankruptcy, the owner can increase the risk of the assets or divert the assets from the creditors to the equity holders. This asset diversion can take the following forms:

- payment of large dividends to owners, thereby leaving less for the creditors
- payment of excessive salaries or exorbitant management fees to a company owned by the entrepreneur of the insolvent firm
- sale of products to associated companies at below cost or purchase of goods from associated companies at excessive prices.

Aware of the diversionary tactics with regard to assets and/or wealth, and in order to protect themselves, creditors will introduce restrictive covenants in the trust indenture. In those instances where the moral-hazard problem is potentially very severe, the lenders may require personal guarantees and/or a rapid repayment schedule. These provisions will internalize the moral hazard to the debtor, and remove the incentive to undertake inappropriate behaviour.

In general, the moral-hazard problem is more severe for those firms in which the owner(s) will obtain the full benefit of any opportunistic behaviour. This is usually the case for a sole proprietorship or small firm. To the extent that the firm's long-run profitability is influenced by management's reputation for commercially moral behaviour, the moral-hazard problem will be minimized. Therefore, personal guarantees are more likely to be used for newly formed small firms.

As the firm approaches insolvency, the probability of moral-hazard behaviour increases. The lender, in order to prevent the diversion of wealth and/or assets, must incur substantial monitoring costs, usually through a receiver. The longer the firm operates before a receiver is appointed, the greater the chance of this diversionary behaviour in susceptible companies.

As a result of the moral-hazard issue, there appears to be a potential problem primarily for small firms. This is certainly true in the loan market, where personal guarantees for loans to small firms are the rule and not the exception. In the asset-redeployment market, it may be a rational, cost-minimizing decision for the secured creditors of small firms to call the loan and force liquidation early in the insolvency process. As it is, collateral coverages and recovery rates fall dramatically from a

time just prior to insolvency to the time of formal default. The gross dollar recovery as a percentage of the loan outstanding at the time of default is 33 per cent. The legal and other expenses amount to 11 per cent of the loan outstanding.¹³

Does the moral-hazard problem justify government intervention to prevent the inappropriate liquidation of a small firm? It is not clear that the government is any better able to evaluate or avoid the moral-hazard potential of individual owners of small companies than the secured, unsecured, or preferred creditors. Having the government provide loan insurance, for example, simply shifts the moral-hazard problem from the creditors to the government. There is no reason to believe that individual entrepreneurs will behave differently depending on whether the ultimate bearer of risk on their debt is a financial institution, individual, or a government organization. Therefore, there is no economic rationale for government intervention in this market to ameliorate the impact of market failure for small firms through moral hazard. As for large firms, the moral-hazard problem is not as severe and the market is unlikely to fail.

Inappropriate investment decisions

The essence of the moral-hazard problem is wealth diversion from creditors to the equity holders of a firm through unexpected behaviour. This can be accomplished by having the firm undertake new investments that increase the risk of the firm or by liquidating assets and investing the proceeds in risky projects. To the extent that the risk facing bondholders increases, the market value of their claims falls. However, since bondholders are now sharing risk with the equity holders to a greater extent, the market value of the *equity holders'* claims increases. Therefore, increasing the risk of the firm's assets is a moral-hazard problem that results in a wealth diversion to equity holders.

Creditors will anticipate this type of opportunistic behaviour and adjust the terms of the loans such that they obtain *ex ante* compensation; this will result in a reduction in the market value of wealth to equity holders. It is therefore in the equity holders' best interests to introduce restrictive provisions in the bond contract that would constrain their future behaviour and thereby increase the stock price. Such provisions could relate to the insurance of senior debt (or 'me first' rules), *pro forma*

as asset- and earnings-coverage tests associated with new debt issues, and restrictions on dividends and major investment decisions.¹⁴

In the context of the market for the redeployment of assets, even if a reorganization is accepted the lenders must still be vigilant. Here, it is in the debtor's best interest to undertake an unanticipated increase in the risk of the assets after the restructuring is completed. This behaviour would increase the market value of the debtor's claim at the expense of the value of the creditor's claims. This behaviour is more prevalent in small companies where a change in assets can have a substantial impact on the overall risk of the entity and where the principal plays several roles – owner, manager, employee, and sometimes creditor. For a large firm, in order to increase the overall risk, substantial changes in assets are required; this would be difficult to achieve without attracting attention.

Other creditors of the firm

Another moral-hazard issue arises with respect to customers, suppliers, and workers who can be thought of as outside associates of the firm.¹⁵ In entering into a contract with the firm, these parties will take into consideration the costs imposed upon them by a firm's liquidation; these costs can include search or retooling costs for workers and suppliers of job-specific capital and higher-than-expected operating (repair) costs for customers who have purchased products that require service (perhaps provided by the firm through a warranty). At the time the contract is established, these associates will choose an appropriate level of compensation that, given the probability of a liquidation, will compensate them *ex ante* for the liquidation costs; thus the firm will bear these expected liquidation costs¹⁶ in a perfectly functioning market.

However, once the relationship is established, over the life of the contract the associates are subject to a moral-hazard problem since it is in the equity holders' interest to ignore the liquidation costs and force the firm into liquidation whenever the liquidation value exceeds the operating value. This will result in a higher than expected probability of liquidation and a wealth transfer from the associates to the equity holders. Since these parties are cognizant of this behaviour, the levels of compensation would be lower if the equity holders could convince the associates that their behaviour will not be opportunistic.

Just as in the other moral-hazard examples, equity holders will voluntarily undertake actions which would guarantee to the associated parties that the firm will liquidate only under optimal conditions. One example of such undertakings is the provision of a set of liquidating contracts that specifies the conditions under which liquidation will occur and the penalties to be exacted if the contract is not met. This, however, would be a high-cost undertaking due to monitoring and policing costs. Alternatively, the equity holders could contract to pay liquidation costs to the affected parties in the event of a liquidation. To the extent that the liquidation costs of the various parties can be estimated, this would be a viable strategy. For example, consider a product that requires substantial servicing by the firm; if the firm is liquidated the customer must acquire the servicing elsewhere and thus bear these costs. At the time of sale, in an efficient market, the price of the product would have reflected the probability of liquidation and the costs associated with obtaining the maintenance and services elsewhere. Therefore, *ex ante* the customer is protected. To ensure that the optimal liquidation decision is followed, at the time of sale the firm also could have contributed a fixed amount to a fund that is equal to the expected liquidation costs over the life of the machine. If there is no liquidation, the fund proceeds would revert to the company. In this way, the equity holder could guarantee that in the event of liquidation the liquidation costs would be covered. This would generate a higher price for the product.¹⁷ This cost-internalizing behaviour in some situations may be induced by government regulations (e.g., with regard to the protection of travellers who purchase vacation packages).

For other parties such as employees and suppliers, liquidation costs may be very large. However, these values, in the event of liquidation, are in some ways conditional on the behaviour of the parties themselves (e.g., a self-imposed, protracted search procedure). Therefore, liquidation contracts or contingency funds may not be very useful in these cases.

Titman (1982) demonstrates that instead of using liquidation contracts, equity holders can, through their choice of capital structure, generate liquidation behaviour that is consistent with the optimal policy expected by associated parties at the time the contract was established. With such an appropriate capital structure, it would be approximately true that the bondholders would obtain control of the firm and liquidate only when the liquidation value exceeds the operating value by at least the liquidation costs. Unfortunately, the capital-structure contracts

necessary to achieve such results are complex and can only be simplified under quite restrictive conditions.

How important is this issue in the bailout context? To answer this question, we must examine how much the potential for opportunistic behaviour depends on: the importance of these 'creditors' to the operation of the firm; the term over which the creditors are exposed to the potential for opportunistic behaviour; and the degree to which they have protected themselves in their negotiations.

The first issue is an empirical question and can be investigated by looking at factors such as the amount of labour used, the skill level required, and potential moving and search costs. The second and third issues are also reasonably easy to evaluate. If the terms of the contracts are short, then renegotiations can be undertaken that would permit the 'creditors' to better protect themselves in light of any new information. Thus, if a high probability of bankruptcy and liquidation arose, a customer of a firm whose product required a warranty could begin to pay a lower price. The creditors who are more at risk are those who have signed a contract and have no escape (e.g., a person who has purchased the product with the expectation at the time of purchase of a three-year warranty). We can observe this type of liquidation cost in the White Farm bankruptcy discussed later in the volume; in this case study, the dealers were worried that a liquidation would stop the flow of repair parts and thereby reduce dramatically the value of their inventories. When such costs appear to be substantial, the government may decide to intervene in order to prevent these liquidation costs from being realized.

When the moral-hazard problem is serious, markets may fail to exist since voluntary transactions will not occur. If they do occur where moral hazard exists, this implies that the participants in the market either have found mechanisms to ameliorate opportunistic behaviour, that the prices paid in the transactions reflect the participants' attempts to protect themselves, or else that the participants in the market are irrational. However, in most if not all instances, the explanation based on irrationality can be ruled out. If either of the first two conditions exist then there has been *ex ante* compensation for opportunistic behaviour. Thus, any intervention by the government in the bankruptcy would only provide *ex post* benefits to participants who have already received compensation *ex ante*.

Adverse selection

In many markets, participants in a contract or exchange have different information, and this asymmetry in information may lead to the adverse-selection problem. Again this concept arises in the insurance literature. As an example, consider the loan insurance granted by the Enterprise Development Program (EDP). The premium charged for loan insurance is fixed and independent of the risk of the company asking for assistance. It is very costly to segment companies into different risk classifications even though the management of the company knows its default risk. By setting a fixed premium, however, there is a self-selection problem. Those companies with risks less than the level of risk implicit in the insurance premium will not take the insurance. Those companies with higher risks will take the insurance, since their probability of invoking the insurance is very high and not fully reflected in the premium that must be paid. The net effect is that the risk of companies that accept the loan insurance is higher than the risk the insurance premium covers. Over time, if this were not a government-provided service, the market could fail since the insurance premium would be raised each year that the loss experience was worse than expected; eventually there would be no company that will pay the premium required to compensate for the insurance risk. The only way out of such a dilemma would be to spend the resources required to classify companies properly as to their risk and charge different insurance premiums.

Adverse selection can also arise in loan markets where there is asymmetry in information concerning the risk of firms and where financial institutions set a single interest rate. Those companies that have risks higher than the level of risk implicit in the interest rate will accept the loan since they perceive that their probability of repaying the loan is very low. Under this scenario, however, Stiglitz and Weiss (1981) demonstrate that an equilibrium interest rate still will exist even if there is an excess demand for loans. Banks will engage in credit rationing and thereby deny loans to borrowers who are observationally indistinguishable from those who receive credit; this behaviour is consistent with profit maximization by the financial institution. At the equilibrium interest rate, even if there is an excess demand for loans, it will not pay the bank to increase the interest rate or require more collateral. To do so would induce a set of more risky debtors. The overall effect would be to reduce the financial institution's profits.

In the market for the redeployment of assets, while asymmetry in information remains a problem, it is not as severe as in the loan market. In the former market, a very involved credit assessment is undertaken along with a trustee's or receiver's report. Moreover, adverse selection is not a justification for government intervention. If asymmetric information does exist, it will remain a problem even if the government provides assistance. Thus, if the government has decided to intervene, it is for reasons other than to stop adverse selection. The government may, however, minimize the adverse-selection problem in insolvency cases by delaying their assistance decision. During the delay, those firms that are truly of above-average risk will be liquidated by secured creditors who are unwilling to bear the risk or monitoring costs. The government also can utilize a selection strategy to offset the self-selection problem that is introduced by asymmetric information.

*Underinvestment*¹⁸

As was noted in the previous section, it is in the equity holders' best interests to undergo restrictions on their freedom to run the company when it approaches a state of financial distress, so as to increase their wealth. However, these restrictions can lead to another form of market failure – the failure to undertake an investment when it is socially optimal.

Consider, for example, a firm that is close to default. The current market value of its equity is low and the promised and expected rates of interest on its debt are very high; that is, the bondholders are bearing substantial risk. Management must decide whether or not to take on a profitable and riskless investment decision. The project would result in a reduction of risk to existing bondholders through higher cash flows in all possible states of the economy and larger asset values in the event of default and liquidation. This would increase the market value of the bondholders and this increase in turn would reflect a shift of wealth from existing equity holders. In fact, the wealth transfer due to the reduced risk might be sufficiently large to reduce the stock price of the firm. However, due to the bond covenants on new financings, the project must be financed by equity; if the management makes decisions that are in the best interests of existing equity holders, the project may not be undertaken even though it would be an efficient use of capital resources.

A numerical example is illustrated in Table 9. In *Panel A* the status quo position is presented. The market value of the firm (\$95.65) is less than the face value of the debt (\$150). Bankruptcy seems highly likely; the ratio of debt to total assets is very high at 0.73 and the promised and expected interest rates on debt are 71.4 per cent and 11.4 per cent respectively. With one hundred shares outstanding, the price per share would be 25.6 cents.

The new investment project illustrated in *Panel B* of Table 9 would require an investment of \$20 and provide an additional \$30 to the cash flows in either the good or bad state. This riskless project is acceptable from society's point of view since its net present value, when evaluated at a risk-free rate of 5 per cent, is \$8.57; i.e., the project is expected to cover the initial cost and also provide a benefit of \$8.5 through the use of resources. If the project is accepted, the market values of equity would be \$35.22, reflecting an increase of only \$9.60 even though \$20 of equity would have been raised.

In this case, where would the remaining wealth go? The total possible wealth gain would be equal to the present value of the project – \$28.57 (\$20 investment plus \$8.57 benefit). Due to the reduction in risk, the market value of outstanding debt would increase by \$18.97; bondholders would appropriate most of the gains from the investment. The promised expected rates of interest would fall to 34.8 per cent and 7.9 per cent respectively and the firm, although still under threat of default, would be in improved financial health. Due to the investment and the expected wealth transfer, the stock price would fall to 15.2 cents per share. Thus, to raise the \$20, a new issue of 132 shares would be required. The current shareholders, due to this share issue, would lose \$10.42 (original value of \$25.62 less the market value of the 100 shares at the new price per share).

Therefore, even though this project should be undertaken since the increase in firm value would be greater than the amount invested, equity holders would be worse off and underinvestment would occur. As can be observed in this example, this problem would be acute for firms with debt-intensive capital structures and poor profitability.

This market failure is of a different character than other market failures considered to this point; the latter reflected problems in the market for the redeployment of assets once a firm is put into receivership or bankruptcy. In the above example the firm is still viable, although there is a substantial probability that it will find itself in financial dis-

TABLE 9

An illustration of the underinvestment problem

Panel A – status quo

State	Probability	Cash flow from assets	Bond payments		Equity
			Promised	Expected	
Good	0.4	200	120	120	80
Bad	0.6	50	120	50	0

Market values: firm \$95.65; bond \$70.03; equity \$25.62

Panel B – after new investment

State	Probability	Cash flow from assets	Bond payments		Equity
			Promised	Expected	
Good	0.4	230	120	120	110
Bad	0.6	80	120	80	0

Market values: firm \$124.44; bond \$89.00; equity \$35.22

tress at the point in time when a debt payment must be made. Nevertheless, since the market-failure problem it represents is closely related to the other market-failure problems observed, the same questions will be addressed: namely, is there a role for government intervention due to market failure? If so, what form should this intervention take?

Before considering interventionist strategies, however, alternative strategies open to troubled companies that would permit the undertaking of new investment projects without a wealth loss for equity holders must be considered. Assuming that the equity holders make the bondholders aware of the implications of any new project for the market value of the bondholders' claim, active negotiations should circumvent this problem. One approach would be to convince the bondholders that they should invest in the project along with the equity holders. To the extent that the bondholders are a homogeneous group, so that the transactions costs of negotiating and circumventing existing bond covenants

are minimal, this approach should be successful. In fact, if this group of bondholders is aware of the project, it is in the bondholders' best interests to compensate the equity holders for their wealth loss if the project is undertaken and financed with equity. This would leave the bondholders with a gain in wealth and the equity holders unharmed. In our numerical example illustrated in part in Table 10, the minimum 'bribe' required would be \$10.42. Since the wealth gain to the bondholders would be \$18.97, they could pay the bribe and still be better off by \$8.55.

An alternative strategy that may avoid the debt-financing restrictions found in the trust indenture would be to form a separate subsidiary that would undertake the project and be financed predominantly with debt. The parent company's debt holders would still obtain a gain, albeit a much smaller one, because of the increased earnings that would be made. The result would be equivalent to having the existing bondholders finance the project.¹⁹

To the extent that these market responses cannot remedy the market failure, the government may have to intervene and thereby incur costs.²⁰ Possible intervention strategies would include: the payment of a cash grant to existing equity holders equal to the wealth loss they would face if the project were undertaken; the provision of loans at subsidized interest rates and guarantees on privately provided debt and preferred equity; and complicated exchange offers that would convert outstanding debt to equity.²¹ The first method would compensate the equity holders directly whereas the other methods would offset the impact of the wealth loss by indirect means.

Having noted the potential for the underinvestment problem to exist, once again the important question is: to what extent is it sufficiently serious to warrant government intervention? And at an even more basic level, is this a problem that is indeed likely to arise in practice?

With regard to the first question, consider the bailout case where management approaches a government agency (perhaps at the urging of creditors) to obtain assistance in investing in a new project. If the project looks to be profitable, why then, we must ask, are not the creditors providing more funds, since it is they that would gain from the investment? One answer might be that the creditors are thinking of liquidating the company in the near future. This is an option that is not considered in the underinvestment scenario, since the firm is not yet technically in default. Therefore, we can conclude that in a bailout, an underinvestment problem is incorporated into the analysis of the market for the

redployment of assets even when creditors have the option of either putting new money into the firm or of liquidating. It also appears to be assumed that all bondholders have the same priority or if this is not the case, that there is no strategic behaviour among priority classes. We shall further discuss this later in this chapter.

With regard to the second question, the severity of the underinvestment problem and hence the extent of the wealth transfer to bondholders would be dependent upon an abnormally debt-intensive capital structure, low profitability, the specific cash-flow characteristics of any new investment project being considered, and the size of the investment relative to the preinvestment value of the firm. The first two conditions generate a high probability of bankruptcy; the second two define the extent of the wealth transfer to the bondholders. Given an impending bankruptcy, it would be fortuitous for a firm to find a promising new investment project. In reality, however, the interest and energy of the management of a troubled firm are usually focused on simply keeping the firm viable and not on making significant new investment decisions. In addition, if the firm is close to bankruptcy, it is very likely that bondholders have sufficient justification to appoint a receiver and begin the process by which they can take over or reorganize the firm. Having done this, any underinvestment problem would cease to exist. In this context, it is unlikely that market failure induced by underinvestment is an acceptable justification for a bailout. Thus, we can conclude that bailout assistance is precipitated by a bankruptcy and not an underinvestment by equity holders.

Impact of other regulations

The discussions in previous sections of this chapter were concerned with the receivership/bankruptcy regulations through which insolvent companies were either liquidated or rehabilitated. However, other regulations by government also can have a negative influence on the proper functioning of markets in which assets are redeployed through providing a bias toward the use of the bailout mechanism. In this section, five examples of such regulations are presented – anticombiner legislation, takeover-bid legislation, the legislation embodied in the Foreign Investment Review Agency (FIRA) and other Canadian-control strategies, and programmatic bailout assistance.

The first example of an alternative process to receivership/bankruptcy could, if available, be used to redirect assets, perhaps in a more efficient manner. However, the usefulness of this and the other alternatives may be constrained by regulations of precisely those activities that are crucial to their proper functioning. Under such a scenario the government could thus end up intervening to prevent a liquidation that otherwise could have been avoided if the alternative mechanisms had been allowed to function freely.

The important alternatives are: the takeover-bid mechanism for companies with publicly traded equity and a hostile incumbent management; the merger route for companies with an acquiescent management; or the bid to purchase the assets of an insolvent firm. Again, some of the regulations that may constrain the use of these alternatives are: anticombiner legislation, FIRA, and takeover-bid legislation.

Before considering the influence of these regulations on the viability of the alternative strategies, it is useful to see how these strategies themselves fit into the market for the redeployment of assets.

As previously discussed, one procedure to deal with insolvent firms is the use of the provisions of the Bankruptcy Act. These provisions of the Act, however, can be costly and involve so much time to adhere to that the value of the creditors' security can diminish in the meantime. Another option discussed was the receivership route. This process can commence before actual insolvency occurs; once a breach of debt covenants exists, secured creditors can send in an interim receiver to evaluate the viability of the firm and the value of its assets (which in turn influence the value of the secured creditors' claims in a liquidation). Subsequently, if it is determined that there is a danger that the debtor will be unable to meet the requirements of a loan, costly procedures may be required here as well. These would include either a liquidation or a 'workout' proposal.

If the firm is worth more as a going concern than the value of its liquidated assets, one alternative to the above procedures is to sell the assets to another firm. In addition, a takeover bid can be made for the firm; this can occur not just when the firm is insolvent but perhaps at an earlier time when the firm is floundering. This set of alternatives to the bankruptcy/reorganization route may be less costly than others to use and may permit a more rapid redeployment of assets. Thus, economic welfare could be improved if this alternative were available.

The takeover-bid alternative brings into focus a concept known as the market for corporate control. If poor management in a firm (either through improper investment, financing, or operating decisions) has resulted in a depressed market value for the equity of the firm, this facilitates a bid for the equity by another firm that offers to reorganize the operations of the floundering firm and increase its profitability. The takeover bid is usually at a substantial premium above the pretakeover-bid stock price and the offer is for a control block; however, once control is obtained, other purchases of stock will be at a price that does not reflect the control premium. The takeover-bid route is an alternative to the workout-proposal route for a floundering or insolvent firm that has long-run viability if certain changes are made.²²

If these takeover or asset-acquisition routes are not available, a liquidation may be the best cost-minimizing strategy for the creditors of the bankrupt firm. The government may also be forced to act by providing bailout assistance if it wishes to stop the liquidation. Thus, a bailout that appears to have been a response to an inappropriate liquidation by the private market may in fact have been caused by regulatory-induced market failures. With this in mind, we will now consider some of the regulations which may inhibit the use of the takeover/merger route.

Anticombiners legislation

Under Canadian law, the federal government exercises constitutional jurisdiction over regulating anticompetitive practices in most industries. However, antimerger enforcement has probably had a negligible impact on the market for redeployment of assets. The government has never won a merger case that actually went to trial and only a few cases have been prosecuted. No proceedings have ever been initiated when the firm to be acquired has been insolvent or close to financial failure, but in the government's most recent proposals for reform of merger law, the draft statute Bill C17 mentions the prospect of insolvency as a factor to be considered in deciding whether a reviewable merger should be allowed to proceed. In sum, it seems very unlikely that Canadian merger law has increased either the direct costs or uncertainty costs of participants in the market for the redeployment of assets.

Takeover-bid legislation

Conventional wisdom views a merger or takeover arrangement as a 'civilized' alternative to bankruptcy or liquidation proceedings. To the extent that these arrangements provide changes in ownership and management to permit the company to continue operations at lower transaction costs than would hold for the bankruptcy or reorganization route, it is felt that they should be encouraged.

In undertaking a takeover bid, the bidding firm must incur substantial transactions costs: these include legal, accounting, and filing fees and the costs of delay that are implicit when there are regulatory hurdles still to clear. Some exemptions to these takeover regulations are available. However, no specific exemptions are made for takeovers in the context of failing firms.

A potentially onerous regulation in Ontario is that a followup offer must be made if a takeover bid has been made by way of an offer to purchase the target firm's shares at a significant premium to the market price. Although there is a private-agreement exemption under Section 91(1) of the Ontario Securities Act, it cannot be applied if the price paid for the securities is greater than 115 per cent of the simple average of the closing prices of the shares on the preceding ten trading days. Thus, within 180 days the acquiror firm must offer to purchase all additional outstanding shares of the same class that is owned by shareholders resident in Ontario at a value per share no less than the greatest consideration paid under the private agreement.

This particular regulation implies that control is not an individual-shareholder asset but rather a corporate one. Thus, it also implies that controlling shareholders should not receive a premium for delivering control to the acquiror; or, that any premium should be made available to all shareholders. This provision certainly increases the cost of any takeover and hence may operate against a takeover of a failing firm. In addition, there are administrative nightmares that are encountered in the operation of the followup-offer regulation. These include: the valuation of consideration given, especially when it is based on different securities; the definition of a base price on which to calculate the 115 per cent trigger; and the requirement to make a followup offer within 180 days even if the circumstances of the firm and/or the market have changed so that to make the offer would not be in the best interests of the shareholders.

These nightmares also serve to increase dramatically the cost of a takeover and may be sufficient to dissuade a takeover bid. The resulting market failure, however, could be ameliorated if the takeover regulations permitted a failing-firm exemption.

Foreign Investment Review Agency (FIRA)

While the Liberal government was in power in Ottawa, a Canadian business enterprise could not be acquired by a noneligible entity (i.e., a non-Canadian-owned firm) and a noneligible entity could not begin a new business in Canada until FIRA first reviewed the transaction and provided clearance. This meant that the Cabinet had become the regulatory decision-maker.

Given the issues addressed in this study, we will consider only the influence that FIRA had on acquisitions. FIRA (1982) deals specifically with the acquisition of businesses that have ceased normal business operations. It states that if a business is defunct, the business is not defined as a Canadian business enterprise and its acquisition is non-reviewable by FIRA. What is defined as defunct depends upon the circumstances of the case, but the key variable is whether the business has been closed permanently or temporarily (e.g., due to a labour dispute or a shortage of raw materials). The latter is not considered to be a defunct company and hence any acquisition of it is listed as a reviewable transaction.

FIRA (1982) goes on to state that if the business is in the hands of a trustee under the Bankruptcy Act or a receiver, it is not considered defunct. However, if the assets in either case are to be liquidated on a piecemeal basis, i.e., the company cannot be revived, even if the receiver continues operations the business would be defined as defunct and any acquisition of the assets would be nonreviewable. Alternatively, if the firm is expected to continue operations through a workout proposal, the company would not be considered defunct and any acquisition by an eligible entity would be reviewable.

As FIRA did not make any special arrangements for a company that was insolvent, the acquisition of an insolvent firm with potential for a turnaround was considered to be a reviewable transaction. In such a case, the procedures to obtain clearance were costly both in time delays and out-of-pocket costs. Both of these factors mitigated against the

usefulness of the acquisition route to expedite the redeployment of assets of failing firms.

During the 1981/2 fiscal year, of 592 resolved applications (as of August 1982) eighty-four were rejected (i.e., there was a success ratio of 86 per cent) and approximately 48 per cent (not including those withdrawn) were for acquisitions; the figures for 1982/3 were 927 applications and forty-eight rejections (a success ratio of 95 per cent).²³ The success ratios, especially for 1982/3, at first blush do not suggest that FIRA had any major dampening influence on the acquisition market and hence on our specific concern of redeployment of assets. However, what these figures do not show is the number of companies that either withdrew their applications because it was unlikely that they would obtain approval or did not even consider making an application due to the costs.²⁴

Other Canadian-control strategies

There is another constraint on the takeover/merger route that is also based on the desire to maintain Canadian control of corporations in certain sectors; examples would include publishing, oil, and gas. It is possible that the government does not want a takeover of an insolvent Canadian firm by a non-Canadian firm but also does not want to use an instrument such as FIRA. In this case, the government might utilize bailout assistance and thereby short-circuit the bankruptcy market, a market which does not consider the nationality of the purchaser of the insolvent firm.

For example, consider a company that is insolvent. The creditors plan to sell it as a going concern. There is an offer to purchase, or, more likely, expressions of interest by a non-Canadian company. The government is against a non-Canadian purchase and may not want to use an agency such as FIRA to reject the offer, for reasons ranging from desiring to avoid possible violations of GATT agreements to the serious international political consequences following from the rejection of the bid of a foreign company that has expertise in the firm's area. Under these conditions, the government can prevent the potential conflict by providing bailout assistance to the firm. The government, in effect, acts as the receiver, through assisting in the rescheduling of debt obligations and providing grants or loan insurance. By implementing a workout, foreign control of

the firm also has been thwarted without the use of any politically damaging actions.

On the one hand, the economy has been made worse off by the government receivership. A foreign-controlled firm might have been more efficient and more resources could have been saved. The continued operations of the bankrupt firm based on a subsidy by the government also serves to shift wealth from taxpayers to other participants in the process. On the other hand, arguments can and have been made that a Canadian presence in certain industries is essential.

Programmatic bailout assistance

The final example of a regulatory induced market failure is the very existence of programmatic (and even *ad hoc*) bailout assistance. Consider a firm that is insolvent and approaches the secured creditors to obtain agreement on a proposal. The proposal involves a restructuring of the existing debt and perhaps a new line of operating credit. If the firm qualifies for programmatic bailout assistance and if it is viable only in the long run, however, the incentive for a bank to participate in a restructuring would be diminished. A bank, if it intends to maximize the market value of its claim, would instead suggest that the firm attempt to obtain bailout assistance. The equity holder would also provide the same counsel. As long as the bailout assistance is provided at less than market rates (e.g., so that the loan-insurance fee would be less than the rate that would exist given the risk, or that the interest rate on debt would be less than risk-adjusted market rates), there would be a gain in wealth to the existing equity holders as well.

Some examples are presented in the following tables to demonstrate such a wealth transfer. Consider a firm that is unable to meet its debt obligations. If the firm is continued for one more period, the operating cash flows at the end of the period would be either \$750 or \$250, with each outcome having a probability of 0.5. Assuming for ease of calculation that the interest rate is zero, the current going-concern value of the firm would thus be \$500; this would also be the current market value of the debt, since the obligation to the bondholders based on the original loan is equal to the promised payment of \$750. Given a liquidation value of \$200, the firm should be continued.

Suppose that the firm approaches a government agency that will provide a loan guarantee at zero cost. The agency then convinces the debt

holders that the value of their claim should be no greater than what it would be under the free-market case, i.e., \$500. The cash-flow payoffs to the investors under this scenario are presented in Table 10. In this example, the loan guarantee provides a transfer of wealth of \$125 from the guarantor to the equity holder. This could be reduced if the guarantor took an equity interest as payment for the loan guarantee. In fact, the correct payment for the loan guarantee in this example would be \$125 and would be made by the equity holders, so that there would be no transfer of wealth.

Alternatively, the bank may be able to persuade the government agency that its claim should have a value of \$750. The cash-flow consequences of this scenario are presented in Table 11. In this example, the full wealth transfer goes to the bank. Of course, combinations will result in different gains to equity and/or debt holders; the two tables present the extremes.

In both examples, the bank's claim under bailout assistance is no less than what it would have been without assistance. Similarly, the equity holder's wealth under the assistance is no worse than zero. Therefore, these investors have an incentive to ignore the capital market and go directly to a bailout. Therefore, the government agency may no longer be used as a lender of last resort.

This analysis can also demonstrate why a bank may threaten liquidation and request that an insolvent company apply for bailout assistance even though a liquidation is the correct market decision. For example, consider the cash-flow patterns in Table 11. The value of the claim upon continuance without assistance is \$500 and let us assume that the liquidation value is \$650. By using the loan guarantee, however, the market value of the guaranteed debtor's claim (i.e., \$750) would be greater than the liquidation value and the bank would obtain the full wealth transfer. In fact, at a bank claim guaranteed for \$650, the bank would continue operation of the firm and the equity holder's claim would be worth \$50.

The main disincentive to secured creditors to threaten a liquidation and suggest bailout assistance is that the assistance is not provided immediately. Thus, during the time period when the government agency collects data and eventually makes a decision, the secured creditor has an opportunity cost, since the funds could have been earning a return if redeployed. In addition, receivers (or trustees) must be appointed to protect the assets. Since this is costly to do, it will also mitigate against secured creditors using the bailout-assistance strategy for troubled firms.

TABLE 10

Cash-flow consequences if claim valued at \$500

Outcome	Cash flow: total operations	Cash flow to guaranteed debt	Cash flow to equity	Cash flow to guarantor
Good	\$750	\$500	\$250	\$0
Bad	250	500	0	-250
Market values	\$500	\$500	\$125	\$.125

TABLE 11

Cash-flow consequences if claim valued at \$750

Outcome	Cash flow: total operations	Cash flow to guaranteed debt	Cash flow to equity	Cash flow to guarantor
Good	\$750	\$750	\$0	\$0
Bad	250	750	0	-500
Market values	\$500	\$750	\$0	\$.250

Creditors have too high a discount rate

One argument that is used to explain government intervention concerns the alleged 'unreasonably' heavy weight given by market participants to near-term payoffs from investment projects (and by extension the 'unreasonably' light weight given to future payoffs). This argument has its antecedents in corporate-investment theory, where it is argued that since managers are rewarded based on short-term rules of thumb, such as current earnings per share, there will be a bias toward accepting projects with large, near-term cash flows and rejecting those with payoffs further in the future. Such an argument is often used to explain why Japan has been more successful in introducing new technologies in certain industries as compared to the United States. Note that the argument is not against the overall capital market's preference for current over future cash flows, but rather is against inappropriately specified goals for managers. Although we are not considering this issue directly, it is the case that North American industry does invest in

projects that have long gestation periods. In addition, we would argue that it is extremely simplistic to assume that the success of the Japanese economy can be related solely to their acceptance of projects which have payoffs further in the future.

The above argument is also applied to reorganization/restructuring propositions. It is often alleged that creditors tend to value future cash flows too lightly and hence are biased toward rejecting options that would keep the firm in operation. Creditors, in evaluating a restructuring proposition, derive estimates of the cash flows they expect to receive from their adjusted claims in the restructured firm. These cash flows are expected to arise through continued operations and the specifics of their claims (e.g., a restructuring may provide an existing secured creditor with a debt instrument whose face value is some proportion of the prerestructured value and a stipulated number of common shares). Discounting the expected cash flows from the claims at an opportunity-cost discount rate, the creditor obtains a separate estimate of the claim's market value under continued operations. This market value can be compared to the value that could be obtained under a liquidation; the former represents the dollars given up by the creditor to continue the operation (i.e., the cost of the investment) and the latter represents the market value of this investment. Continuation would be a viable strategy only when the cost of the investment is less than the market value of the future cash flows. In the reverse case, the investor would be giving up a specific amount of money, say \$100,000, to obtain a claim with a market value less than \$100,000. This would not be a rational decision.²⁵

In this model of the reorganization market, a higher discount rate would result in less weight being given to cash flows further in the future and hence a lower market value. This would lead to a rejection of any restructuring propositions. Conversely, acceptance of these propositions would be encouraged if the discount rate were lower.

Government intervention in this case, then, is based on the perceived inappropriately high values of the discount rates used by private participants in the capital market. Using the 'wrong' discount rate would result in the liquidation of the firm. Therefore, some form of government assistance may be required to prevent the inappropriate liquidation of the firm.

Under this argument, there is no claim made that the creditors systematically underestimate the future cash flows from the firm under

continuation scenarios. It is reasonable to assume that creditors have experience in this type of credit evaluation and that any expertise would more likely be found in the private than in the government sector.

To evaluate this argument for government intervention, consider the components of the discount rate that are used in the restructuring decision. The discount rate can be written as the sum of the interest rate on government debt (R_f) and the risk premium (RP). The former reflects the pure time value of money, i.e., the capital market's preference of current over future consumption. The second component reflects the risk of the expected cash flow of the claim being evaluated and the security behind the claim. Thus, a fully secured claim would require a different risk premium than a claim composed of both debt and common-equity components.

It is important to recognize that when the creditor uses this discount rate, it is the market participant's time preference and compensation for risk that are being satisfied. Hence, the argument that the discount rate is too high implies that market participants are either too risk-averse or have too high a preference for current consumption.²⁶

Considering the first element in the discount-rate relationship, the government could not justify evaluating a proposal at a discount rate less than the government-bond rate since this would reflect the cost of funds to a riskless investment. But this discount rate would also reflect the marginal rate of time preference of society. Therefore, the 'excessively high' discount rate cannot have its source in the time-preference component.

Alternatively, the discount rate may be too high because of an excessive risk premium. However, this risk premium reflects society's tradeoff between risk and return. The market-determined discount rate would have been used to evaluate the viability of the project when it was first introduced. The fact that forecasted cash flows at that time did not subsequently materialize does not suggest that a nonmarket-determined discount rate should be used when the firm becomes insolvent. Therefore, the appropriate discount rate must be a market-determined one so as to reflect society's time and risk preferences.

There are other problems with the argument that the private discount rate is 'too high'. First, in order to operationalize this argument, an alternative discount rate must be specified as a benchmark; this rate must have both risk- and time-preference elements. However, whose preferences would be incorporated? One possibility is politicians'. But a

politician's time horizon is likely to be very short – future benefits are weighed lightly in his or her decision calculus. In fact, the future benefits could be given less weight here than an entrepreneur would give them.²⁷

Second, if the argument is correct, bailouts would be more likely to occur for companies for which the cash flows under a continuation would be relatively slow in materializing. It is an empirical question whether bailout assistance is provided primarily to firms meeting this criterion; some evidence on this issue will be presented in Chapter 8. In addition, in a reorganization scenario it is not the future aspects of cash flows that are a problem, but rather the severe uncertainty over a relatively short period of time (usually two years) as to whether the firm will survive. Therefore, the size of the discount rate and the resulting weight given to future cash flows is at best a second-order effect.

Uncertainty and diversification of risk

In the previous section the concept of a market-determined discount rate used in the evaluation of restructuring propositions was discussed. The argument for government intervention was as an offset to a discount rate that was excessively high.

In this section we address a slightly different issue – the relative ability of the government and the private market to diversify risk and the implication of this on bailout assistance. The argument presented here would justify government assistance even if the correct market-determined discount rate were used in the evaluation of any proposed restructuring.

A market-determined discount rate reflects risk that could not be diversified away by investors who hold reasonably large portfolios of stocks and bonds. This remaining risk does not reflect the risk of a security in isolation but how that security's payoffs relate to movements in the overall economy. For example, a security whose cash flows are unaffected by the economic health of the economy is riskless, whereas a security whose cash flows have a large association with changes in the economic health of the economy (represented, for example, by GNP) are considered risky. The financial markets determine yields or expected returns to compensate for nondiversifiable risk since it is expected that investors would already have diversified away other risk either in their own portfolio or by holding a mutual fund. In the context of a restruc-

turing, the discount rate used will reflect the nondiversifiable risk of the cash flows of the firm under the restructuring.

It has been argued that governments are more efficient at risk diversification than are financial markets since they can spread any potential losses over a large number of taxpayers. In fact, this risk-spreading argument has been used to conclude that even the nondiversifiable risk (as it relates to financial-market diversification) can be diversified. The implication of this argument is that the nominal social discount rate should equal the nominal interest rate on long-term government debt – referred to as the riskless rate of interest. It is argued, for example, that this discount rate should be used to evaluate the investment decisions of crown corporations. This concept of government risk-spreading has been presented by a number of economists (see Arrow 1971). However, the argument is not without its detractors.²⁸

Fortunately, the application of the social discount rate in the insolvency context does not depend on which side in this debate is correct. Let us assume here that it is accepted that the social discount rate is equal to the riskless rate of interest. In an insolvency, then, the probability that a restructuring will be accepted would increase if the discount rate used is the riskless rate and not a risk-adjusted one. However, it would be legitimate for this discount rate to be used by participants in the restructuring only if the government intervenes in the process and makes the claims to the creditors riskless through, for example, a loan guarantee.

If there is a superior ability of the government to diversity away risk, then it should be involved in all restructuring proposals.²⁹ However, this tells us little – government assistance is not provided in every acceptable restructuring proposal. Therefore, the risk-spreading argument cannot explain bailout activity by the government. Other benefits of bailing out insolvent companies will have to be used to justify government intervention.

Unfunded pension liabilities

Many company pension plans are structured so that the benefits upon retirement are based on the number of years of service and some combination of the salary earned in the last years of employment before retirement; this is known as a defined-benefit plan. Its benefits are funded through funds invested in a special account. At bankruptcy, the plan is terminated and employees look to the assets in the pension fund

to pay the benefits that have accrued up to the date of bankruptcy. However, upon termination of the plan, it is possible that the accrued benefits that are payable would be greater than the market value of the assets set aside. Of course, the opposite is also possible. If there is a deficiency, there is an unfunded pension liability.

Does the existence of an unfunded pension liability always signify a market failure that requires government intervention? Suppose that fully informed workers' negotiations with companies are based on a total compensation package that includes elements concerning wage compensation, pensions, and other benefits. The total compensation package would include a risk premium to cover, *ex ante*, the risk of bankruptcy and the probability of unfunded pension liabilities. In addition, renegotiation of the risk premium would be permitted in the event of any new information. Under this scenario, a decision by secured creditors to liquidate the firm and thereby terminate the pension plan would not generate a real-resource externality (since the market had earlier extracted compensation for the *ex ante* risk), albeit considerable pecuniary externalities may be involved *ex post* as workers lose some of their pension income.

Suppose now that the management had information that was not available to labour concerning the true possibility of bankruptcy and the size of the unfunded pension liabilities. In this case, labour would not have negotiated the correct risk-adjusted compensation package and there would be a wealth transfer from labour to the shareholders of the firm. The bankruptcy of the firm and the resulting unfunded pension liabilities would reflect an externality (or market failure). Under this scenario, government may intervene to compensate labour for the loss in wealth. Of course, if labour did not risk-adjust their compensation package due to mismanagement, government intervention would be based only on paternalistic grounds. Before deciding to provide government assistance, the government will determine the magnitude of the unfunded pension liabilities; this will depend upon the type of plan that is in existence, the level of interest rates, and the performance of the stock market.

Some plans are more prone to having an underfunding problem than others. But from an efficiency point of view, the only rationale for intervention is market failure. Nonetheless, political reasons may be the underlying factor for assistance in a number of instances.

In assessing this externality argument, it will be difficult to identify whether or not government intervention is warranted due to market failure, even if there is a significant unfunded pension liability. A proper assessment of the market-failure argument would require evidence on the continuing asymmetry in information between labour and shareholders' agents and this is very difficult to find.

There has been some empirical research on pension plans to determine the degree of underfunding based on plan termination as of a particular date (Ezra 1983). Of the approximately 100 pension plans investigated, none had unfunded pension liabilities; therefore, it would not appear to be a major problem if plans were terminated at the evaluation date. However, the pension plans considered did not include firms that were insolvent and in receivership or bankruptcy. It is possible that these firms have a different pattern of unfunded pension liabilities.

The pension area in Ontario is currently in a state of change. Due to the recent surge of bankruptcies and the resulting possible large, unfunded pension liabilities, legislation was introduced to provide pension-plan termination insurance. Aside from a number of technicalities concerning the extent of the coverage, the insurance provides for the funding of any unfunded pension liabilities out of the shareholders' equity upon the termination of a plan.

In a bankruptcy, however, the shareholders' equity is zero and the firm may not be able to raise money to pay off the unfunded pension liabilities. In this case, the unfunded liabilities would become a claim on the assets of the firm. A bankruptcy court could, on a case-by-case basis, decide that the unfunded liability will be given higher priority than the secured creditors.

The unfunded pension liabilities are assumed to be a deemed trust where assets have been set aside to pay the claim.³⁰ The law is very new and applications of it are few; therefore, its impact on proposals and receiverships is as yet unknown.

Monopoly power of financial institutions

The empirical evidence documented in a number of studies, as summarized in the discussion concerning the existence of a credit gap, has led a number of researchers to conclude that there is competition between the short-term and medium-term loan markets and thus that interest rates and other terms found in loan contracts are market

determined. However, would the same conclusion hold when, given that a loan has been made, an insolvency occurs?

For a competitive market it is necessary that there be ease of entry and exit. In the context of the bankruptcy market, this implies that a long-term viable but short-run financially troubled firm can go to another financial institution to obtain the funds necessary to keep it operating. However, attaining this access to funds may not be a simple task, especially for a small, insolvent firm. Any new lender would have to incur transactions costs in evaluating the loan; these costs include not only marketing and administrative costs but also search costs. The latter set of costs would be incurred to obtain the information about the insolvent company and its long-run potential that the financial institution currently being used already has. In addition, the fact that the firm is insolvent implies that the new lender would be particularly worried about monitoring problems. Therefore, it appears that the currently used financial institution may have some monopoly power – at least to the degree that is reflected by the higher transactions costs of a new entrant. This conclusion may have to be modified somewhat for a larger firm, since in this case transactions costs as a proportion of the loan would probably be lower.

Given that there may be some monopoly power, how useful is it when applied to a firm that is in financial trouble? For one, the monopoly power may be used to extract payoffs in a restructuring that are higher than what would have been observed under a competitive market. This would result in a bias toward rejecting proposals and workouts provided by insolvent companies. Of course, not all of the restructurings would be squelched by the financial institution. Alternatively, the financial institution may behave precipitously and call the loan at the first threat of insolvency, thereby ignoring the possibility of any restructuring.

One possible counterargument to the above is that the borrowers are aware, *ex ante*, of the potential for monopoly power being exercised by the financial institution in the event of an insolvency. This possibility would be factored in at the time that the loan is made. Given that the loan market is competitive, the interest rate on the loan would be reduced accordingly. In a well-functioning loan market, the lender would only make a normal rate of return on the loan, which would include an option to exercise monopoly power at the time of an insolvency. This analysis suggests that the presence of monopoly power is not an important consideration.

From an empirical point of view, it is very difficult to relate the observed behaviour of financial institutions and the dearth of proposals under insolvency to a monopoly-power argument. Even in a competitive market that is characterized by moral-hazard issues, the risk of dissipation of assets, and high transactions costs, it would be expected that for small, insolvent firms, loans would be called quickly and restructurings would be few in number. Therefore, although the monopoly-power argument may be persuasive to some, equally cogent arguments can be made to explain observed behaviour without resort to monopoly power.

Protection of the banking system

Although a bailout does maintain in existence a financially insolvent firm, it can also have the intended (or unintended) effect of providing a bailout of the financial institution which provided the loan to the insolvent company. Although not pressed as a major consideration for a bailout of the insolvent firm, the associated bailout of the financial institution can be justified as a means to prevent the failure of the banking system.

This rationale is described as follows: a company that is financially insolvent or has a high probability of insolvency has a major loan outstanding with a particular bank (or, in a more extreme case, the bank could have a number of loans out to companies that are now on the brink of insolvency). The uncertainty surrounding the future of the insolvent company (or companies) promotes a crisis of confidence in the bank. Where the insolvent firm's failure is predicted to have an uncertain impact on the profitability of the bank, depositors would be led to liquidate their deposits in the bank. The resulting run on the bank would put the banking system in jeopardy. All of this activity would occur even though deposits of up to \$60,000 maximum are insured by the federal Deposit Insurance Corporation.

To ensure that this problem does not arise, the federal government could bail out the financially insolvent firm and thereby remove the uncertainty or protect the banking system. Of course, the bailout would be only a short-run solution, since all firms that are bailed out do not regain a state of financial prosperity. In addition, the bailout is usually associated with a reduction or deferral in the interest payments and a reduction in the loan outstanding of the firm. Thus, the bank and its

existing equity holders would still bear some costs of the financial insolvency of its debtor in the event of a bailout.

In the government bailout, the depositor's position would be protected (and so also to some extent would be the wealth of the equity holders of the bank) at the expense of maintaining in operation a firm for which a liquidation or a major asset restructuring was the optimal solution. On the other hand, the government has tools available through the Bank of Canada that would also protect the integrity of the banking system in the unlikely event of a serious problem and that would not induce the possible resource misallocation to be found in a bailout.

What would happen to banks and the banking system if there were no bailout of the insolvent company so that a reorganization or liquidation ensued? In either case, the bank would not lose the full amount of the loan. Thus, although there could be a cash-flow problem for the bank and although the market value of equity of the bank would fall, it is unlikely that the bank would become financially insolvent.

This conclusion requires two assumptions: first, that the bank did not make an unreasonably large lending commitment to the insolvent firm relative to its capital; and second, that the bank in making the loan charged an interest rate that reflected the loan's risk given the debtor's capital structure, profitability, and risk.

These two assumptions amount to nothing more than financial common sense. If for some reason the financial institution in making its loan was not consistent with these assumptions, then shareholders and not taxpayers should bear the costs of the decision.

To the extent that the bank is otherwise profitable, the financial market should provide funds to ease the bank over its period of difficulty, or, if possible, the bank should be merged with another bank. Thus, a bailout of a bank that is threatened with financial insolvency is not justified on any of the market-failure arguments considered in this chapter.

BANKRUPTCY-MARKET FAILURE

Strategic behaviour in the insolvency bargain

When a firm becomes insolvent, Canadian law provides certain rules and procedures to regulate creditors' decisions concerning the disposition of their debtor's property. Since the equity holders of a legally insolvent firm have, from a practical standpoint, exhausted the value of their investment, the firm's creditors become its *de facto* owners.³¹ When the

creditors take control of an insolvent firm, either with the debtor's consent or through the invocation of the bankruptcy process, they face two basic collective decisions – one allocative and the other distributive.³² First, they must reach a decision on the appropriate allocation of the firm's assets. As indicated earlier, three general options are available to the creditors:

- liquidation of the assets on a piecemeal basis;
- sale of the firm as a going concern; or
- reorganization of the firm's capital structure to permit its continuation as a going concern.

Each of these three options may be achieved either by unanimous agreement of the creditors and their debtor, or by use of the statutory procedure.³³ Combinations of these three strategies are also possible; for example, a division or subsidiary of the insolvent firm might be sold as a going concern with the remainder of the firm being reorganized or liquidated. As a collectivity, the creditors share a common interest in allocating the debtor's assets to their highest-valued use in order to maximize the resources available for the payment of their claims.

The second question confronting the creditors concerns the inter-creditor distribution of rights to the proceeds of liquidation or sale, or, if the firm is reorganized, to the new securities created by the debtor's recapitalization. In one sense, it is incorrect to characterize the insolvency bargain as distributional in nature. This is because bankruptcy law provides a precise and comprehensive distributional scheme that can only be varied by unanimous consent of all the creditors. Under this scheme, some creditors enjoy distributional priorities over others; these superior entitlements are created either by contract with the debtor or by the bankruptcy statute and allied legislation.³⁴ If these distributional entitlements could be perfectly and costlessly enforced, the insolvency bargain would only involve good-faith differences in business judgement on the value-maximizing allocation of the debtor's property. But since the protection afforded to distributional entitlements in the bankruptcy process is both imperfect and costly, there is always a good chance that some creditors may seek to bargain for a share of the debtor's property that is in excess of their legal entitlement. Such opportunistic behaviour is possible when, for example, junior-priority creditors can credibly threaten to block a value-maximizing reorganization of the debtor's busi-

ness unless they are paid a portion of the seniors' rightful share. In other insolvency bargains, the balance of strategic advantage may lie with the senior-priority creditors. Seniors, whose claims would be fully satisfied by the expected proceeds of the debtor's liquidation, can make highly credible threats to block a value-maximizing reorganization in order to receive a bribe from the juniors' rightful share. These rent-seeking strategies have one common feature that should be of paramount concern in the design of an efficiency-oriented bankruptcy law – they both involve threats to block an efficient redeployment of the debtor's assets. An evaluation of the economic consequences of existing Canadian bankruptcy law thus must turn, at least in part, on how efficiently the regulatory scheme controls strategic behaviour in the insolvency bargain.

Strategic behaviour arises from two basic sources of intercreditor conflicts of interest. One source, referred to above, is the legal distribution scheme, which accords some creditors' claims absolute priority over others. The absolute-priority rule requires that claims of senior rank be fully satisfied before any distribution is made to junior claimants. The legal framework which establishes the distributional entitlements also provides the natural dividing lines for the organization of rival coalitions. In proposal proceedings under the Bankruptcy Act, conflicts are often observed among creditor groups that hold substantially disproportionate stakes in their debtor's property. This unequal-stakes incentive for opportunistic behaviour will be explained more fully below.

The second source of conflict in the insolvency bargain arises from the fact that many creditors of the same priority class will have collateral relationships with the debtor. Trade creditors and employees, for example, stand to realize future gains if the enterprise is continued; they stand to lose a valuable source of prospective income if the decision is made to liquidate. In short, a creditor's collateral relationship with the debtor may induce him to support a proposal for reorganization even though the expected value of his claim as a creditor would be increased by liquidation.³⁵ Many large suppliers and senior managers of the debtor may oppose a sale of the firm to third parties for the same reason – a fear that the new owners will seek new suppliers and managers. When other creditors of the same priority class do not possess valuable collateral relationships with the debtor, intraclass conflicts may arise that lead to strategic behaviour. A dominant majority of creditors with collateral relationships may attempt to impose a reorganization on a

dissenting minority even though a liquidation or sale as a going concern would increase the expected values of creditors' claims. Alternatively, a coalition of creditors without collateral relationships may form for the purpose of extracting a bribe from those who do have a collateral stake in the debtor's survival. Such a coalition could threaten to block an efficient or value-maximizing reorganization unless a side-payment in addition to the legal entitlement due is received.

These examples of opportunities for strategic behaviour suggest a close parallel between the dynamics of the insolvency bargain and other types of collective-choice processes. Voting in legislative bodies or large committees generates the same general problems of majority oppression and minority recalcitrance described above, and many of the legal instruments employed to control these problems have substantial heuristic value for an analysis of bankruptcy law (Mueller 1979, 19-66). From an efficiency standpoint, all collective-choice processes are plagued by the difficulty, or perhaps the practical impossibility, of separating or insulating allocative decisions from distributional concerns. This is the basic problem for an efficiency-oriented bankruptcy law, and the objective of this part of the study is to describe and analyse the ways in which the distributional conflicts inherent in the insolvency bargain affect the allocation of resources. In other words, can we specify the conditions under which the incentives and opportunities for strategic behaviour in the insolvency negotiations might lead to the imposition of an inefficient reorganization, the blocking of an efficient reorganization, or the sale as a going concern? An adequate answer to this question requires the formulation of a conceptual framework that describes the various ways in which strategic behaviour can occur as well as the probability of its occurrence in actual bargaining situations.

Two kinds of advantage-taking in the insolvency bargain can be usefully distinguished. Interclass advantage-taking involves attempts by one priority class to extract concessions from or impose costs on another class. As mentioned earlier, bankruptcy law creates a hierarchy of distributional classes, and this scheme generates conflicts of interest between creditor groups holding superior and inferior priorities. One of the ways in which bankruptcy law attempts to regulate this conflict is by requiring class voting on all important decisions concerning the allocation of the debtor's assets.³⁶ Each priority class must vote separately on any proposal for reorganization or sale as a going concern, and this preempts any attempt by one class to impose either of these decisions on

another. The only threat that the members of one class can make to the members of another is that they will vote to block an efficient reorganization or sale, with the consequence that the debtor's assets will be liquidated (or sold on a piecemeal basis).

Intraclass advantage-taking, the second basic category of strategic behaviour in the insolvency bargain, can occur in one of two ways. A majority of the class may vote to impose an inefficient reorganization or sale on the minority, or at least credibly threaten to do so. Bankruptcy law attempts to police this sort of advantage-taking by requiring supramajority approval for reorganization proposals.³⁷ A second type of intraclass rent-seeking takes the form of organizing a smaller blocking coalition by a minority group with enough votes to credibly threaten to put the debtor into liquidation unless the group members are paid a bribe from the proceeds of an efficient reorganization or sale. While Canadian law does impose some procedural requirements that deter minority holdouts, it can be persuasively argued that the existing regulatory scheme is peculiarly susceptible to rent-seeking strategies that entail threats or actual attempts to block efficient reorganizations or going-concern sales. If there were a systematic bias in the bankruptcy process toward the blocking of efficient reorganizations or sales, government intervention in some form, perhaps including bailout assistance, could be supported on allocative-efficiency grounds.

In order to support an argument for a systematic bias, it is necessary to assess the relative likelihood that strategic behaviour will actually occur in each of the different types of advantage-taking situations described above. Holdout strategies, in both the interclass and intraclass contexts, often involve threats to take action which may be as costly for the threateners as for those threatened. While it may be rational to make and even carry out such threats in some negotiating situations, it is also certain that such strategies are less likely to be employed, or at least effectively employed, than those which are disproportionately less costly for the threateners than those threatened (Linkskold, McElwain, and Wagner 1977, 531; and Abrams 1980, 222-5). Other kinds of bargaining advantages may also be unequally distributed among priority classes or interest groups within classes. Information about the debtor's financial prospects and the value-maximizing allocation of the debtor's assets may be asymmetrically distributed among the creditors. Given this problem, one of the key functions of the bankruptcy trustee is to act as an impartial source of information and analysis for the

creditors.³⁸ Negotiating strategies will also be shaped by the size of each creditor's stake in the outcome. Creditors with large claims will be more likely to commit substantial resources to their participation in insolvency negotiations. Creditors with small claims have less to lose from a nonvalue-maximizing allocation of the debtor's assets, and this fact will enhance the credibility of their holdout threats.

The number of creditors in each priority class and in distinct interest groups within a class is also an important determinant of bargaining strength. Groups with few members will enjoy substantial transactions costs advantages when organizing for concerted action in the negotiations (M. Olson 1971, chs. 2, 3). In this light, bankruptcy law, which weights each creditor's voting power by the size of his claim and requires that the holders of 75 per cent of the value of the total claims vote in favour of a proposed reorganization, often permits one or two creditors with large claims to organize an effective blocking coalition. In addition, very large groups of similarly situated creditors, such as holders of publicly issued bonds or debentures, often agree to the appointment of common agents, i.e., indenture trustees, to represent their interests in the event of insolvency (American Bar Foundation 1971, 220-2). Loan-syndication agreements among banks and other large institutional investors also attempt to deal with the 'large numbers' problem through the appointment of bargaining agents and provisions authorizing a majority of the creditors to bind the entire group in insolvency negotiations (Blum and Kaplan 1976, 287-92).

Large commercial banks and institutional investors may derive substantial advantages from their roles as 'repeat players' in the insolvency process. Creditors who engage in repeated insolvency negotiations with one another will be deterred from exploiting opportunistic strategies for fear that they will be similarly exploited in future negotiations.³⁹ The relatively small number of large commercial banks operating in Canada increases the probability that bank creditors will confront the same negotiating partners in large corporate insolvencies. Trade creditors and other 'single shot' participants in insolvency negotiations are more likely to be the victims of strategic behaviour because they cannot credibly threaten to retaliate in future dealings with the members of their priority class.

To summarize, the incidence of strategic behaviour in insolvency negotiations is determined by a number of structural factors that affect the relative bargaining power of the various priority classes and interest

groups within those classes. Four factors seem particularly relevant to an analysis of strategic behaviour in the bankruptcy process:

- the number of repeat players in a particular class or subgroup
- the relative size of stakes, including the stake in maintaining a valuable collateral relationship with the debtor, between priority classes and also between subgroups of classes
- the number of creditors in each class and in each distinct interest group
- the 'threat advantage' of each class or subgroup, which is determined by the members' expected costs of actually carrying out threats to force an inefficient result in the negotiations.

Since this part of the study is concerned with efficiency rationales for government intervention to prevent the liquidation of very large, insolvent firms, the following analysis will focus on the control of strategic behaviour that involves threats to block efficient reorganizations or going-concern sales. Intervention through the provision of bailout assistance is one possible response to the minority holdout problem, yet it can be argued that regulatory measures aimed directly at such behaviour will usually be a more effective solution. The following analysis considers some possible reforms of Canadian bankruptcy law, such as those that would limit secured creditors' enforcement rights and authorize bankruptcy courts to impose a bargain when negotiations result in a deadlock, that have been proposed as appropriate responses to minority-hold out stalemates.⁴⁰

An adequate analysis of these reform proposals requires an explicit normative framework for evaluating their economic consequences. The next section will attempt to explain how strategic behaviour in the insolvency bargain can impose avoidable costs on creditors and on third parties who lack any legal standing in the negotiations.

Economic consequences of strategic behaviour

Strategic behaviour in the insolvency bargain can have adverse effects on both allocative efficiency and the technical efficiency of the credit market. The preceding section of the paper provided a description of the various ways in which creditor advantage-taking could lead to allocatively inefficient outcomes. The prospect of strategic behaviour in insolvency negotiations will also affect the terms of exchange in the

capital market. For credit sellers, the delays and decreased recoveries resulting from advantage-taking by other creditors are a cost of doing business. Minority holdouts may generate wasteful delays in the bargaining, even if the efficient allocation is ultimately chosen by the creditors. These delays in turn may cause potentially viable firms to deteriorate through loss of key customers and employees; the deadlocked negotiations may cause suppliers to form unduly pessimistic judgements concerning their customer's viability (Roe 1983).⁴¹ Moreover, substantial amounts of senior-management time may be siphoned off by protracted bargaining, with the consequence that the debtor's operational problems lack the attention required to turn the firm around.

Allocatively inefficient dispositions of the debtor's assets also entail private losses to the creditors. Each creditor has an interest in minimizing strategic behaviour which decreases the amounts recovered from insolvent debtors, and, assuming competitive credit markets, credit borrowers will share this concern, since the costs of strategic behaviour will be reflected in interest rates.⁴² Thus, from a cost-minimization standpoint, all participants in the credit market will favour some state intervention to control strategic behaviour in insolvency negotiations. This is because it seems plausible to assume that strategic behaviour entails a negative-sum game for creditors as a collectivity – that creditors as a whole lose more than they gain from advantage-taking in bankruptcy.⁴³ Each creditor might expect to obtain an occasional windfall if strategic behaviour is unregulated, but all creditors must bear the costs of delays, the costs of decreased recoveries, and the direct costs of defensive strategies aimed at countering anticipated advantage-taking by other creditors. Moreover, it can be argued that strategic behaviour will increase the variance in creditor recoveries, with the consequence that creditors will bear higher uncertainty costs if advantage-taking is unregulated (Jackson 1982, 861).

The efficiency rationale for state regulation of the insolvency bargain also depends on a second assumption about transactions costs in the credit market. This assumption is that it would be too costly to hold an *ex ante* meeting of all a debtor's creditors to agree on appropriate controls for strategic behaviour (Smith and Warner 1979, 125-31; White 1980, 556-62). A large firm's pool of creditors will change over time so that the agreement would have to be periodically renegotiated. Moreover, nonconsensual creditors, such as tort claimants, would have in theory to be brought into the agreement. Since the creditors cannot be expected to

negotiate this agreement, even though it would be in their joint interest, there may be an efficiency justification for legal regulation of the insolvency bargain (Jackson 1982, 867 and Ezra 1983). Legal rules governing distributional priorities and collective decision-making procedures can serve to prescribe a minimum set of entitlements and safeguards for each creditor.

Legal rules also can provide a normative framework or starting point for the bargaining on the fate of a debtor's business. However, because of the expense of complying with the formalities required by the Bankruptcy Act, creditors normally first attempt to achieve agreement outside of this legal framework. The direct costs of the legal process are borne entirely by the creditors, and ultimately their debtors, in the form of fee charges. These have the status of a first-priority claim against the debtor's unencumbered assets (Bankruptcy Act, 107 [1](b)). Many students of the legal process have also claimed that the notoriety of the formal procedure may stigmatize reorganized firms and increase their perceived riskiness in the eyes of investors, suppliers, and customers (Coogan, Broude, and Glatt 1975, 1154-60; Krause 1975, 185). Such costs associated with bearing the stigma of bankruptcy, if they are in fact quantitatively significant, will also be borne by the creditors (i.e., the new owners of the reorganized firm).

While the creditors as a group have an initial incentive to reach agreement outside the legal framework, the costs of the formal process, both direct and indirect, still can be viewed as the price that creditors are prepared to pay for state protection from strategic behaviour. Further such legal costs often are unavoidable. Under Canadian law, informal agreements or 'workouts' require unanimous consent; any creditor with a claim of at least \$1,000 (see note 31) can, in effect, veto the workout bargain by invoking the formal process.

Another efficiency justification for state regulation of the insolvency bargain concerns the effects of strategic behaviour on the adjustment or transition costs that usually accompany large corporate insolvencies. These costs are incurred by creditors such as employees and suppliers who have collateral relationships with the insolvent firm, and by noncreditors such as employees, customers, distributors, or residents of the community where the firm is located.⁴⁴ When a large firm becomes insolvent, each individual with a substantial pecuniary stake in the firm's future must decide whether some investment in shifting to a new job, a new customer, or a new community is cost-justified. These invest-

ment decisions will be made under conditions of uncertainty and imperfect information. It can be argued that individual assessments of the probability of the debtor's reorganization may be biased by delays arising from strategic behaviour in the negotiations. For instance, third-party observers of the bargaining may take at face value the holdout's protestations that the debtor's future looks dim and that his or her proposed share of the reorganized enterprise is too small to compensate for the risk. Substantial delay for no apparent purpose other than jockeying for position also may bias the expectations of interested observers toward unjustified pessimism (see note 41). A systematic bias would lead to mistaken investments in adjustment, and these errors by firms and individuals would result in the waste of productive resources as well as private losses. Moreover, when strategic behaviour leads to the frustration of a value-maximizing reorganization, all the adjustment costs incurred because of the debtor's liquidation are unnecessary from an efficiency standpoint and therefore entail a waste of resources.

Finally, state intervention to control creditor advantage-taking could be justified on the grounds of distributional fairness. The distributional effects of strategic behaviour in insolvency negotiations can be evaluated from two perspectives – from the standpoint of the creditors' relative shares in their debtor's property, and from the viewpoint of noncreditors with substantial pecuniary stakes in the debtor's fate. With regard to the first perspective, note that the distribution of the debtor's assets among its creditors is prescribed by the Bankruptcy Act (Bankruptcy Act, 107). If one believes that the Act's distribution scheme reflects social-justice objectives as distinct from efficiency objectives, then one would argue that strategic behaviour aimed at subverting that scheme should be regulated.⁴⁵ For example, given that the distribution scheme provides employees with a limited priority over unsecured creditors, one plausible justification that could be presented in support of this preferred treatment is that employees may have special difficulties in obtaining accurate information regarding their employer's financial situation. Alternatively, it could be argued that employees deserve a distributional priority because they are likely to be less well off than other classes of claimants. Finally, it could be argued that minority-holdout behaviour is analogous to extortion, and is morally censurable regardless of its consequences (see Nozick 1969).

With regard to the second perspective, another distributional rationale for regulation is that some of the adverse impacts from strategic

behaviour will be borne by nonparties to the insolvency negotiations.⁴⁶ Employees, customers, distributors, and community residents may all suffer substantial private losses if a value-maximizing reorganization is blocked as a result of strategic behaviour. Of course, a general-public concern for the distributional effects of large-firm insolvencies would justify a more extensive regulatory scheme than one designed exclusively to control opportunistic behaviour by creditors. Moreover, there may be direct conflicts between the efficiency and distributional goals of regulation in this case. Intraclass advantage-taking may, for example, involve the imposition of a nonvalue-maximizing reorganization by a dominant majority: while the allocation of the debtor's property is inefficient, employees, customers, distributors, and community residents could be permitted to escape or at least postpone the private losses that they would have incurred in a liquidation. Regulatory intervention here thus would require a judgement about the relative priority of the conflicting goals. However, when strategic behaviour takes the form of holding out for a larger share by threatening to block an efficient reorganization, the efficiency and distributional goals of bankruptcy law should be roughly compatible. Further, the rules designed to deter minority holdouts should also reduce the number of large-firm liquidations and the socially undesirable private losses that accompany them.

The argument so far is that *some* form of collectively imposed control is necessary to avoid the inefficiencies created by strategic behaviour in insolvency negotiations. Moreover, legal regulation of minority-holdout behaviour appears to put an end to private losses that are unnecessary from an allocative efficiency standpoint.

The next step in the argument should be to identify the optimal set of regulatory constraints on strategic behaviour by creditors. One way of proceeding might be to sketch out an array of feasible regulatory options, and then attempt to pick the best in light of certain evaluative criteria, i.e., efficiency, fairness, cost minimization, etc. Rather than attempt an *a priori* specification of feasible options, however, it seems more economical to begin with an analysis of how existing Canadian law affects the incidence of strategic behaviour in insolvency negotiations. Such an assessment of the performance of the existing regulatory scheme should provide a useful framework for evaluating alternative forms of intervention, including the provision of bailout assistance.

Legal regulation of strategic behaviour

At least one-half of the large-firm insolvencies in Canada are, by conservative estimate, resolved through workouts in which creditors agree unanimously to liquidate, sell, or reorganize their debtor's business.⁴⁷ (Firms that become insolvent prefer to keep their financial difficulties a secret and, as a consequence, no data are available on the exact proportion of large-firm insolvencies that result in workouts.) Should the workout negotiations break down, either the debtor or one or more of its creditors have legal standing to invoke the statutory process.

The management of the debtor firm, the group that initiates more than 80 per cent of large-firm bankruptcies, has a choice of two distinct forms of legal proceedings. The debtor may apply for a straight bankruptcy proceeding that aims at a sale of the insolvent firm or liquidation of its assets as soon as possible. The alternative would be to make a 'proposal for arrangement' that is designed to continue the debtor's operations, either on a permanent basis after reorganization or on a short-term basis until the firm can be liquidated or sold (Bankruptcy Act, Part III, 32-46). While there are a few significant differences in the rules governing bankruptcies and proposals, both proceedings are designed to create a procedural framework for the creditors' collective decision on the allocation of their debtor's property. Many of the rules common to both proceedings can be plausibly explained as regulatory responses to the problem of creditor advantage-taking in insolvency negotiations.

The following discussion identifies four general rules or principles of bankruptcy law that appear to constrain and deter strategic behaviour by creditors. The existing regulatory system's net impact on the incidence of creditor advantage-taking will be considered after the legal instruments are described.

Judicially enforced distribution scheme

The Bankruptcy Act prescribes a conceptually precise and comprehensive distribution scheme for an insolvent debtor's property that cannot be altered by postinsolvency actions of creditors (Bankruptcy Act, 107). Moreover, it states that preinsolvency transfers to creditors in anticipation of default are voidable, with certain limited exceptions (see Bankruptcy Act, 69-70 on voidable preferences). The statutorily prescribed distribution scheme is protected by an 'automatic stay' provision

that prohibits creditors from pursuing any litigation or private-collection remedies against their debtor after formal proceedings have been initiated (Bankruptcy Act, 49 [1]). The major exception to the automatic-stay rule under Canadian law is that creditors are not restrained from pursuing private or judicial methods for recovering their secured claims (Bankruptcy Act, 49 [2]). This 'exit option' for secured creditors will be discussed in the next section.

If the legal proceeding is a straight bankruptcy, the debtor's assets will be converted into cash or, in some cases, the securities of an acquiring firm. After the sale or sales, the trustees must distribute the proceeds in the following order: first to the secured creditors, whose claims have priority to the extent of the value of the collateral securing them; second to the preferred creditors – the federal and provincial governments, bankruptcy trustees and lawyers, municipal governments and other crown agents, and employees with claims of up to \$500 for unpaid wages; and third to the ordinary creditors, who share *pari passu* in whatever remains of the debtor's property after the secured and preferred claims are satisfied (Bankruptcy Act, 107). Creditors may often be members of more than one class; for example, when a secured claim exceeds the value of its collateral, the claimant will usually file as an unsecured creditor for the balance due. In making these distributions, the trustee must observe the absolute-priority rule or doctrine, which requires that each priority class be paid in full, to the extent that available assets exist, before the next class is paid anything.

The identical scheme for intercreditor distributions prevails in the proposal form of proceeding (Bankruptcy Act, 41[4] and 46). In other words, if a proposal for reorganization is accepted by the creditors, the trustee must distribute the new securities in the insolvent firm in exactly the same order as under straight bankruptcy – first to the secured creditors who opt to participate, then to the preferred creditors, and finally to the ordinary creditors, in absolute priority.

There is some recent work that analyses the efficiency properties of this statutory distribution scheme (Jackson and Kronman 1979, 1143; Schwartz 1981, 1). Much of this writing focuses on the question of whether according paramount status to secured claims is efficient. Most of the efficiency justifications for secured credit are derived from arguments that as some creditors enjoy cost advantages over others in monitoring their debtor's behaviour and enforcing their claims (Schwartz 1981, 1), creditors who are burdened by relatively high enforcement costs

place a greater value on obtaining security than those creditors favoured with less costly methods for enforcing their debt contracts. These arguments are complex and interesting, but they need not be recounted here since this analysis of postinsolvency strategic behaviour is concerned with creditors' efforts to evade the distribution scheme that shapes the terms of their contracts with their common debtor.

There is very little work on the normative justifications for the priority status of preferred creditors (Laskin et al. 1982, 502; Dunlop 1981, 406). Most preferred claims are owed to governments or their political subdivisions and to employees. Preferential treatment for employee claims could be justified on social-welfare grounds, although it should be noted that the current preference is limited to \$500, which is about one week's pay for the average-industrial-wage earner in Canada (Canada 1981, 23-32). The preference for government claims seems harder to justify, especially since governments are armed with a broad array of statutory liens and other special collection rights that private creditors lack.⁴⁸

Regardless of whether the Bankruptcy Act's distribution scheme is efficient or not, if the scheme could be perfectly enforced in both bankruptcy and proposal proceedings, the problem of strategic behaviour in insolvency negotiations would cease to exist. All four of the regulatory measures discussed in this part of the study – judicial review, exit option, supramajority-voting rules and the guillotine rule – can be viewed as instruments for protecting the distribution scheme from various forms of opportunistic behaviour by creditors. Perhaps the most significant of the four instruments is the requirement of judicial review for all bankruptcy distributions and for proposals that are approved by the required majorities of creditor classes.

While judicial review aimed at ensuring that the final distributions to creditors conform with the statutory standard is common to both of the above forms of proceeding, there are some important legal and practical differences in how it is applied to them. First, the court has a statutory duty to review the substantive fairness of reorganization proposals and to refuse to approve proposals that 'are not reasonable or are not calculated to benefit the general body of creditors' regardless of whether any creditor objects or not (Bankruptcy Act, 41[2]). However, formal review of distributions in bankruptcy occurs only when a creditor files an objection with the court (Bankruptcy Act, 123[b]).

Second, as a practical matter, fairness review is much more straightforward when the debtor's assets are converted into cash or marketable securities. As long as the sale or sales are *bona fide* arm's-length transactions, the value of the debtor's property available for distribution is not in doubt. However, this is not the case in proposal proceedings when the debtor's business is to be continued indefinitely and creditors' claims must be paid in the new securities of the reorganized firm. Accurate judgements about whether or not certain creditors are being taken advantage of, either by majority imposition of an exploitive plan or by minority holding-out, require that the court assess the reasonableness of the creditors' respective bargaining positions. Since the value of the reorganized firm will be a matter of substantial uncertainty, even among professional analysts, there is a greater likelihood that significant departures from the statutory distribution scheme will go undetected when the court reviews proposals for reorganization.⁴⁹ In other words, a proposal may exaggerate the expected value of the reorganized firm in order to disguise the fact that a bribe is being paid to an opportunistic minority or that an oppressed minority is receiving less than their statutory entitlement (Blum and Kaplan 1976, 292-354). All other factors aside, it seems certain that courts will make more errors, and more quantitatively significant errors, in evaluating the distributional consequences of reorganization proposals as opposed to payouts in bankruptcy proceedings. This does not necessarily mean that more advantage-taking will occur in proposal proceedings than in bankruptcy cases. If side payments are legal, and promises to make them are enforceable, the opportunistic creditors would be indifferent between collecting their rents from the bankruptcy trustee and taking them in cash from the other creditors. It seems likely, however, that promises to pay bribes in these circumstances would be void and unenforceable in bankruptcy proceedings, since they undermine the policies of the Bankruptcy Act (Waddams 1977, 351-9). Moreover, bribes actually paid would probably be recoverable under some restitutionary theory, since the statutory distribution scheme is clearly designed to protect creditors from exactly this form of exploitation (McCamus 1975, 276-84). Therefore, creditors will have an incentive to disguise their advantage-taking, and this will be relatively easier to do in proposal proceedings.

The third, and probably most significant, difference between the characteristics of judicial review in the two forms of proceeding arises from certain limits on the court's power to control creditor negotiations on

proposals. If a minority blocking coalition holds out for a bribe and the bribe is not paid, the coalition members may carry out any threats they may have made to block the reorganization that is favoured by their fellow creditors. When threats of this kind are carried out and the insolvent firm is liquidated, the Bankruptcy Act makes no provision for judicial intervention. The court's only remedial power is to nullify unfair insolvency bargains; it has no power to impose a reorganization bargain as a remedy for opportunistic holding-out. In fact, the Bankruptcy Act provides that if the voting by creditors results in a rejection of the reorganization plan, the case is automatically transformed into a straight bankruptcy proceeding (Bankruptcy Act, 39[1]). This provision of the Act is usually referred to as the 'guillotine rule', and its implications for strategic behaviour will be considered in a subsequent section.

Exit option for secured creditors

The policy of the Canadian legislation is one of noninterference with secured creditors' contractual rights to enforce their security interests when their debtor defaults. A secured creditor may proceed with the realization of his or her security regardless of what form of statutory process is initiated. (Bankruptcy Act, 49[2]). Secured claims are exempt from the Act's 'automatic stay' rule, and a secured creditor may act virtually independently of any proposal accepted by other creditors, or of any bankruptcy trustee attempting to sell the insolvent firm as a going concern. If collateral is in the creditor's possession when either form of legal process is initiated, the trustee, as the common agent of all the creditors, has a right to require the secured creditor to declare the value of the collateral and to redeem the security by paying either the full amount of the secured claim or the value declared by the creditor if it is less than the claim (Bankruptcy Act, 99[3]). If the trustee disputes the creditor's valuation of the collateral, his only remedy is to demand a public sale of the property (Bankruptcy Act, 100[1]). If the collateral is in the possession of the insolvent debtor or its trustee, a secured creditor may force the release of the collateral within fifteen days by filing a formal demand with the trustee (Bankruptcy Act, 59). Finally, a secured creditor who either realizes on his security through a sale or reaches agreement with the trustee on the collateral's fair market value is also entitled to participate in both bankruptcy or proposal proceedings as an

ordinary creditor to recover any deficiency between the value of the security and the amount of the claim (Bankruptcy Act, 98[1] and 99[2]).

This statutory scheme hence provides secured creditors with an 'exit option' – a right to refuse to participate in either form of legal process. The secured creditor's right to stay out of formal proceedings provides strong protection from opportunistic behaviour by other creditors. A secured creditor cannot be forced, not even by a 75 per cent vote of the debtor's other secured creditors, to participate in a reorganization or going-concern sale. Nor can a secured creditor be intimidated by minority-holdout threats and delaying tactics that increase the risk that the collateral will depreciate before its value can be realized.

The exit option is not, however, equally attractive to all secured creditors. It will be most advantageous for *fully secured* creditors – those claimants who would realize the full amount of their secured claim, plus their collection costs, from an immediate sale of the collateral.⁵⁰ Since fully secured creditors can, however, also recover their full claim in the formal process, they may be indifferent between immediate realization on their securities and participation in either bankruptcy or proposal proceedings unless there is a substantial risk of depreciation in the value of their collateral. The latter prospect would, of course, create an incentive for immediate realization.

Any incentive for immediate foreclosure upon default will be diminished if the creditor is uncertain about whether he or she is, in fact, fully secured or instead has overestimated the current-market value of the collateral. Secured creditors who believe their security interest to be worth substantially less than the face amount of their claims will have a strong incentive to co-operate with unsecured creditors in bringing about a value-maximizing reorganization or going-concern sale.

The secured creditor's exit option suggests a dilemma that seems inherent in most legal instruments for the control of strategic behaviour in insolvency negotiations. While the exit option deters some types of opportunistic behaviour rather well, it also enhances the bargaining power of fully secured creditors who may threaten to remove key operating assets unless they receive a bribe. Indeed, whether or not the exit option does lead to a net decrease in the social costs of strategic behaviour is a question that has aroused some recent controversy. Several Canadian commentators have criticized the exit option on the grounds that it permits 'irresponsible creditors' to 'pull the plug' on firms with favourable economic prospects.⁵¹ A legal expert has stated that, as

a consequence of the exit option, 'the secured creditor is normally able to extract preferential terms of repayment as he has no incentive to co-operate with the trustee in attempting to run the business to maximize realization of the bankrupt's estate for the benefit of the general creditors' (Coburn 1979-80, 350, fn. 17). The Canadian commentators have failed, however, to provide any estimate of the frequency of successful holding-out for bribes by secured creditors. This information is essential to an evaluation of the efficiency consequences of the exit option.

Jackson (1982, 865) argues that extortion attempts by fully secured creditors are unlikely to be successful, and that many threats to exit are in fact carried out, with the consequence that a substantial number of value-maximizing reorganization and going-concern sales are blocked by the exit option. Jackson also argues that in large-firm insolvencies, which usually entail large numbers of creditors, it would be very costly for the creditors to reach agreement on the payment of a bribe to fully secured creditors who threaten to exit with key assets (*ibid.*, 869). It would be equally costly, he argues, for the creditors to act collectively and repurchase the assets at a forced public sale. Some of the transactions costs would arise from free-rider problems in securing pro rata contributions from the large number of creditors involved. Other costs would arise from the bilateral-monopoly nature of the bargaining between the fully secured holdout and the other creditors. For these reasons, Jackson concludes that '*ex post* deals capable of preserving the debtor's going concern value, while possible, would not be very likely in a large number of cases' (*ibid.*, 865). He also concludes that mandatory inclusion of secured creditors in the formal process would be preferable to the exit option on efficiency grounds.

In order to assess this argument against the exit option, it is necessary to consider the risks of exploitation to fully secured creditors under a mandatory-inclusion regime. Under Jackson's preferred scheme, secured creditors would be required to leave their collateral in the debtor's custody, and to vote as members of their class on the appropriate disposition of their debtor's assets. Fully secured creditors would have no cause to be intimidated by threats of other creditors to block a value-maximizing reorganization or going-concern sale since, by assumption, they would receive full payment of their claims in an immediate liquidation. They would, however, be vulnerable to extortion threats by coalitions of creditors who are not fully secured and who have the voting

power to force a continuation of the debtor's business that would reduce the expected value of their claims below what they would receive in a liquidation. This form of advantage-taking also likely would lead to complex, costly, and potentially intractable negotiations to resolve the fate of the debtor's business, although it can plausibly be argued that these costs would be less than the costs attendant upon holding out by fully secured creditors with an exit option. First, majority exploitation requires the organization of a fairly large number of secured creditors (i.e., the holders of 75 per cent of the secured claims), and the high transactions costs of forming such a coalition suggest that this type of strategic behaviour would occur less frequently than would holding out by fully secured creditors.⁵² Second, the threat to force a nonvalue-maximizing allocation of the debtor's assets would be costly for the members of the strategic coalition to carry out, as their own claims would decrease in value along with those of fully secured creditors. Meanwhile, threats to block an efficient reorganization or going-concern sale could be carried out by fully secured creditors at zero cost. Finally, if a strategic coalition did succeed in organizing to threaten fully secured creditors, it can plausibly be argued that an allocatively inefficient result would nevertheless be unlikely because it would be relatively easy for the targets of the threat to bargain collectively to pay the bribe. Fully secured creditors are invariably few in number, and thus are able to avoid the high transactions cost and free-rider problems that burden larger creditor groups.⁵³

To sum up, the efficiency claim for a mandatory-inclusion rule is supported by some plausible arguments that suggest it would deter a form of strategic behaviour (i.e., holding out by fully secured creditors) that is more costly than the opportunistic conduct it would facilitate (i.e., majority exploitation by secured creditors). But a complete evaluation of the comparative merits of mandatory inclusion versus the exit option also requires some consideration of how voting rules shape incentives for strategic behaviour.

Two basic features of voting rules that are relevant to the choice between mandatory inclusion and the exit option are discussed below. First, the current voting rules may operate so as to encourage majority exploitation of fully secured creditors. These incentives need to be taken into account in assessing the relative efficiency of a mandatory-inclusion rule. Second, the impact of the voting rules on the bargaining power of fully secured creditors is also an important factor in analysing the

probable consequences of repealing the exit option. For example, as will be explained in the next section, fully secured creditors holding relatively large claims may be in a highly advantageous position to make holdout threats, regardless of whether or not they have a legal right to exit, because of the voting rule that the creditor(s) holding one quarter of the total value of all secured claims can block any proposal.

Weighted voting by priority class

The creditors' collective decision on the appropriate allocation of their debtor's property is taken by voting. The voting procedure specified by the Bankruptcy Act is basically the same for both forms of legal proceeding. The bankruptcy or proposal trustee is required to provide creditors with a 'statement of affairs' concerning the debtor's business in advance of the vote (Bankruptcy Act, 32[5]). The trustee is also obliged to provide any creditor who makes a specific request with additional factual information pertaining to the value of the debtor's assets or liabilities (Bankruptcy Act, 13[9]). Creditors may vote on the proposal in person or by proxy letter; the trustee tallies the votes and announces the result at a formal creditors' meeting. Each creditor's voting power is determined by the face value of his claim. Under the statutory formula, a creditor is basically entitled to one vote for every claim of one thousand dollars, although creditors whose individual claims are less than one thousand dollars are also permitted to vote (Bankruptcy Act, 93). As indicated earlier, each priority class is entitled to vote separately in both bankruptcy and proposal proceedings (Bankruptcy Act, 36 and 85). In the bankruptcy form of proceeding, the question confronting the creditors is whether the debtor's business will be liquidated or sold as a going concern. Either allocation requires the support of a simple majority (i.e., 51 per cent of the votes of each participating class), which means that creditors holding at least 51 per cent of the total claims of each class must agree to any disposition of the debtor's property (Bankruptcy Act, 93).

In the proposal form of proceeding, the question confronting the creditors is whether or not the insolvent firm should be reorganized and operated as a going concern by the creditors. The adoption of a proposal for reorganization requires the affirmative vote of a simple majority of the creditors eligible to vote in each priority class and also the support of creditors holding at least 75 per cent of the total claims of each class

(Bankruptcy Act, 36 and 2). If a proposal fails to win the approval of all participating classes, the proceeding is automatically transformed into a straight bankruptcy and a second vote is conducted on whether the firm should be liquidated or sold as a going concern (Bankruptcy Act, 39[1]).

The voting rule for proposals can be decomposed into four components: (1) voting by priority class; (2) votes allocated on the basis of the value of each creditor's claim; (3) 75 per cent of the votes in each class cast in favour of the proposal; and (4) approval of the proposal by a simple majority of the creditors in each class. In order to identify the purposes of these rules, it is useful to begin with some specification of the concrete circumstances that seem most likely to generate strategic behaviour in the voting process. At first glance, the supramajority-voting requirement for the approval of proposals seems puzzling from the standpoint of allocative efficiency, since the rule creates a clear bias in favour of liquidation or the sale of the debtor's business. Perhaps it can be argued, however, that certain features of proposal proceedings create relatively higher risks of majority exploitation and that this asymmetry in opportunities for advantage-taking provides an efficiency rationale for the allocative bias imparted by the supramajority-approval requirement.

Two kinds of intercreditor conflicts of interest seem to be the most likely sources of strong incentives for opportunism. First, the co-existence of groups of creditors possessing valuable collateral relationships with the debtor and other groups of creditors who lack such relational interests may generate strategic conflicts. Second, there is the risk that creditors with relatively small claims may attempt to exploit creditors with large claims. Since aversion to risk is partly a function of the amount at stake, creditor preferences in regard to the allocation of their debtor's property will be influenced by the relative size of their respective claims. Small-claim creditors might be willing to support reorganization proposals involving substantial financial risk (i.e., with a high variance in anticipated returns) if they could compel a minority of large-claim creditors to, in effect, put up most of the capital. Moreover, since small-claim creditors have much less to lose from an inefficient disposition of the debtor's property, they have a stronger incentive to attempt to organize a blocking coalition in order to extract a bribe from large-claim creditors.

Conflicts of interest that arise from the existence of unequal stakes among creditors are regulated by two components of the voting procedure. First, the provisions for class voting can be justified by the

fact that senior-priority creditors are likely to have substantially larger stakes in the debtor's property than junior-priority creditors. The unequal-stakes problem between priority classes arises as a result of the Bankruptcy Act's absolute-priority distribution scheme. If junior classes could compel senior classes to participate in an arrangement without their consent, the existence of unequal stakes between classes would often provide a strong incentive for juniors to attempt to impose a non-value-maximizing allocation on seniors. In short, class voting operates as a check on interclass advantage-taking animated by the presence of unequal stakes.

Second, the weighting feature of the voting rules can be explained as a constraint on intraclass advantage-taking caused by the presence of unequal stakes among creditors in the same priority class. If voting power were allocated on a one-vote-per-creditor basis, it would be less costly for small-claim creditors to organize minimum winning or blocking coalitions for the purpose of extorting bribes from large-claim creditors. By weighting each creditor's voting power by reference to the size of his claim, the present rule discourages the formation of majority coalitions of small-claim creditors animated by a desire to 'gamble with other people's money'. The weighting rule also deters the organization of minimum blocking coalitions designed to extort payoffs from large-claim creditors who have relatively more to lose from an inefficient disposition of the debtor's assets.

While the Act's voting rule is an effective instrument for policing the problem of unequal stakes within classes of unsecured and preferred creditors, it is of limited use in regulating similar conflicts among classes of secured creditors. This deficiency in the weighted voting rule arises because the Act allocates voting power by reference to the face amount of a creditor's claim and not by the claim's current market value (Bankruptcy Act, 93). Since unsecured creditors receive a pro rata share of the debtor's unpledged assets, the economic value of each claim is a direct function of its face value (i.e., if the insolvent firm owes \$100 in unsecured claims, \$10 of which is owed to creditor A, creditor A is entitled to 10 per cent of the firm's unpledged assets). In contrast, the economic value of a secured claim is determined by the current market value of the underlying security. If the secured claimant is *fully* secured, the economic value and face value of the claim are identical. In many cases, however, the assets comprising the security may be worth much less than the face value of the secured claim. Since each secured

creditor's voting power is determined by the face value of his secured claim and not its economic value, the Act's weighting rule may encourage secured creditors to behave strategically. The rule creates an incentive for organizing coalitions of secured creditors holding relatively small claims but backed by substantial voting power for the purpose of extorting bribes from, or imposing uncompensated risks on, secured creditors holding large claims.

It is uncertain whether this deficiency in the Act's vote-weighting scheme is inefficient. In order to ensure an accurate alignment between the size of each creditor's real stake and its voting power, it would be necessary to conduct an expert valuation of claims when disputes arose among creditors. However, it would be costly to hold valuation proceedings, and it is not clear that the economic gain from deterring strategic behaviour arising from unequal stakes would justify incurring those costs. One might imagine that if it paid to hold valuation proceedings before votes were taken, creditors would already have discovered this source of cost savings and put it into practice. On the other hand, the absence of a valuation practice might be attributed to impediments to the voluntary organization of creditors after an insolvency occurs and in particular to their likely difficulties in agreeing on cost-sharing arrangements.

The third component of the Act's voting rules is the requirement that 75 per cent of the votes in each class (with votes being allocated on the basis of the value of each creditor's claim) must be cast in the affirmative in order for a proposal to succeed. From the standpoint of deterring strategic behaviour, this requirement of supramajority consent can be viewed as incorporating the basic empirical judgement that the costs arising from a majority imposition of inefficient plans would outweigh the costs of having efficient plans blocked by opportunistic minorities. In other words, the supramajority-voting rule embodies the practical assumption that the dynamics of coalition formation in insolvency negotiations favour exploitive majorities over opportunistic minorities.

In terms of the unequal-stakes motive for strategic behaviour, however, there does not seem to be much support for this empirical judgement. For preferred and unsecured creditors, weighted voting operates to impose significant obstacles to the organization of small-claim-creditor coalitions. In the case of secured creditors, there is no reason to believe that the supramajority requirement would compensate for the deficiency in the weighted-voting rule noted above. Secured creditors

holding relatively small stakes in a proposal would seem to face the same costs in organizing a holdout coalition as they would incur in forming a majority group to impose a plan on those members of their class with large claims. In addition, there is no factual basis for concluding that payoffs to exploitive majorities would be, on average, greater than the bribes paid to holdout groups. In short, there does not appear to be any plausible reason for rationalizing the supramajority rule in terms of the problem of unequal stakes.

An alternative justification for the supramajority rule focuses on the incentives for opportunism that are created by the presence of collateral relationships between creditors and the debtor. One objection to this argument is the claim that these incentives likely exert only a fairly negligible influence on creditor behaviour. Although trade creditors undoubtedly would be interested in preserving their debtor-customer's business, the costs of converting a claim to a long-term financial commitment through extensive negotiations and the more tangible benefit of an immediate cash payment may often outweigh the uncertain gain from increasing the financial viability of a single customer (Roe 1983, 542-4; Brudney 1974, 328-32). Moreover, many of the creditors in large corporate insolvencies will be banks, public bondholders, and other institutional lenders. These types of creditors usually will not expect the value of continuous, repeated dealings with the debtor to outweigh the expected gain that would arise from allocating the debtor's assets to their highest-valued use. In spite of these considerations, however, it seems clear that the incentives generated by collateral relationships do pull in the direction of inefficient continuation of the debtor's business. Creditors with collateral relationships would have no interest in organizing blocking coalitions. Therefore, the risk of majority exploitation as a result of collateral relations would seem to outweigh the negligible (zero) risk of minority holding out, and this is precisely the state of affairs that provides an efficiency rationale for the supramajority-voting rule.

The fourth component of the Act's weighting rule is the requirement that a simple majority of each class of creditors (i.e., with one person or firm having one vote) must vote in favour of a reorganization plan. Here, it should be noted that the only kind of votes in straight bankruptcy proceedings are weighted votes, and that there is no rational justification for this additional voting component in proposal cases. Not only does allocating voting power on any basis other than the size of a creditor's stake seem arbitrary and unfair, but there is also some evidence that this

dual-voting requirement in proposal proceedings – i.e., that any reorganization plan must win the approval both of creditors holding 75 per cent of the claims and a simple majority of all the creditors in each class – allows creditors holding small claims to, in effect, sell their votes to the proponents of the reorganization plan.

Several recent and successful proposals have provided for payment in full of all claims of up to \$2,000. Perhaps it is efficient to pay off small creditors in full if the costs of administering their participation in the reorganization are likely to exceed the face value of their claims. On the other hand, it is difficult to believe that the costs of reorganization, or at least the costs attributable to those with small claims, would amount to \$2,000 per creditor. A more likely explanation for this solicitude on behalf of small creditors may be that while these creditors have relatively little to lose from immediate liquidation, the proponents of reorganization stand to suffer large losses. With this in mind, the dual-voting rule can be seen to provide small creditors with a powerful weapon for extorting more than their statutorily prescribed share of the debtor's property. An examination of creditor lists in two recent, successful proposal cases⁵⁴ seems to confirm this concern for strategic behaviour by small-claim creditors. In both cases, the amount of the cash payoff seemed to be determined by the median value of creditors' claims. In other words, the payments were designed to secure the support of a simple majority of the creditors, and not to reflect some minimum amount of administrative expense that it would be cheaper to avoid.

Guillotine rule

While the Bankruptcy Act in the main reflects a legislative pre-occupation with the protection of minority interests, one unusual provision of the statute seems to be specifically designed to deter minority holdouts. This is the 'guillotine rule', which provides that if a reorganization proposal fails to win the required approval of those creditors that hold 75 per cent of the claims, the creditors' meeting is to be automatically transformed into a straight bankruptcy proceeding (Bankruptcy Act, 39[1]). The effect of this rule is to permit an immediate vote on whether the debtor's business should be liquidated or sold as a going concern – outcomes that require only the simply-majority support of 51 per cent of each participating class. The general effect of the guillotine rule is to increase the downside risk of holding out; once the

vote is taken, there is no subsequent opportunity to avert an inefficient allocation. Thus, where the execution of a holdout threat would be costly to the members of a minority coalition (i.e., because their claims would be worth less if the debtor's business were liquidated or sold), the guillotine rule should reduce the incidence of strategic behaviour. However, where it would involve only negligible costs to the threatener, as in the case of fully secured creditors, the guillotine rule would not exert any deterrent effect.

Conclusions and implications for bailout assistance and bankruptcy-law reform

The main argument of this part of the study is based on the premise that strategic behaviour in insolvency negotiations is a particular case of the 'prisoners' dilemma' problem. In this oft-seen game, the two prisoners are trapped by their inability to make credible commitments not to testify against one another. As a result, opportunistic behaviour (i.e., implicating one's co-conspirator) becomes the dominant or preferred strategy. The creditors of a large corporate debtor are trapped, in an analogous sense, by the high transaction costs of making credible commitments not to behave opportunistically in the event of their debtor's insolvency. If creditors as a group stand to lose more than they would gain from advantage-taking in insolvency situations, then one plausible rationale for bankruptcy legislation is that such legislation imposes an efficient set of rules for controlling strategic behaviour – namely, that set of rules which the creditors would have established for themselves if the transactions costs of doing so had been lower. A second rationale for legal regulation of insolvency negotiations arises from the risk that strategic behaviour may block or delay reorganization and, as a consequence, impose avoidable costs on employees, customers, and community residents.

But the case for legal regulation also depends on the direct and indirect costs of the legal instruments that have been designed to control opportunism. First, all the direct costs of the regulatory system would be borne by creditors; and they are free to avoid those costs by negotiating a compromise outside of the legal system. Second the main problem with the existing legal scheme is that some of its mechanisms for controlling strategic behaviour generate indirect costs that would appear to exceed their probable benefits. For example, two provisions of the current

Bankruptcy Act – the secured creditor's exit option and the 75-per-cent-approval requirement for reorganizations – may not only provide an excessive level of protection from majority exploitation but also encourage a more costly form of strategic behaviour in its place – minority holdouts that could delay or block value-maximizing reallocations of the debtor's assets. In other words, the basic problem with these two regulatory instruments is that they are 'shields' that can be transformed too readily into more powerful 'swords' in the hands of an opportunistic minority.

If the main deficiency in the existing regulatory scheme is an inefficiently low level of protection against minority interests, then recent instances of bailout assistance can be explained as a response to the Bankruptcy Act's bias in favour of liquidation or sale of insolvent firms. An examination of the case studies presented later in our study should shed some light on whether or not the government's rescue efforts have been initiated, at least in part, as a response to negotiating stalemates attributable to minority interests. It should not be surprising to learn, however, that the evidence from the case studies is usually ambiguous or indeterminate on the question of what the true motives were of those creditors who refused to consent to reorganization proposals. They may have been attributable to a good-faith difference of opinion concerning the expected value of the reorganized firm, or to a desire to obtain more than their rightful share of the debtor's property. Such motives can, of course, only be inferred from the objective circumstances of insolvency negotiations; any holdouts would have no incentive to declare or admit that the debtor's business would be worth more if reorganized, or that their opposition has been animated by a desire to be bought off by other creditors.

This general problem of how to characterize the motives of dissenting creditors only by reference to the reasonableness of their demands in the negotiations forces the external observer to focus on expert opinions concerning the expected values of the debtor's assets in their alternative uses. Since there will usually be a range of plausible expected values for a reorganized firm, any regulatory response that depends on an external assessment of the reasonableness of minority demands will either be of limited effectiveness or prone to a high rate of erroneous intervention. Both bailout assistance and judicial review are susceptible to this criticism – they are both likely to generate indirect costs that may exceed the value of their contributions to the control of opportunistic behaviour.

This suggests that the superior regulatory strategy is to design 'automatic' or self-enforcing constraints on advantage-taking in insolvency negotiations. Chapter 10 will analyse the concrete reforms that would be required to implement such a strategy.

NOTES

- 1 An insolvent company is defined as one that meets any of the following three conditions:
 - the value of debts is in excess of the fair value of assets
 - the debtor is unable to meet debt obligations as they come due
 - the debtor is unable to meet current expenditure obligations.
- 2 For the purposes of this discussion, risk need not be defined in a rigorous manner.
- 3 This point is amplified in the following section in this chapter.
- 4 The same kind of financial information is required for a private placement as well as for a public issue of corporate debt, secured or unsecured.
- 5 This is calculated as the expected cash flow to the lender of \$1,000 ($1100 \times 0.5 + 900 \times 0.5$) divided by 1.10 (or 10 per cent).
- 6 In the case of an unsecured debenture issue, the promised rate will reflect these administrative costs.
- 7 The risks of strategic behaviour by creditors, either within a given priority class or between classes, is evaluated in a later section of this chapter.
- 8 The identical problem would confront the financial institution in the event of a voluntary workout under reorganization.
- 9 The expected cash flow is \$750 ($1000 \times 0.5 + 500 \times 0.5$), and the risk-free rate remains at 10 per cent.
- 10 As restructuring can occur through a receivership, the basic arguments made in this section are generally applicable to receiverships.
- 11 To minimize transaction costs, proposals usually provide for payment in full of small claims, e.g., claims less than or equal to \$500; in addition, other creditors whose proven claims are in excess of \$500 may agree to surrender their claims in exchange for an immediate payment of a stated amount (e.g., \$500).
- 12 This is referred to as the principal-agent problem. See Jensen and Meckling (1976).

- 13 Wynant et al. (1982) present data on fifty-four small-business defaults in Ontario. Just prior to default, the ratio of the value of collateral to the authorized loan is 0.98, and at the time of default, it is 0.77 (182, Exhibit 66). The amounts received by the bank in the liquidation are less than 40 per cent of the security value measured just prior to default.

Further evidence on the valuation of claims in liquidation is presented in Kryzanowski and Holland (1982, 6). They note that in their sample the estimated value relative to the book value of various asset classes was as follows: accounts receivable, 0.522; inventory, 0.425; fixed assets, 0.471. Since the realized value tends to be less than the estimated value, these ratios underestimate the erosion of value relative to the book value of the assets.

- 14 Under certain circumstances, the attempt to incorporate expectations concerning equity holders' opportunistic behaviour into the terms of a loan leads to a serious gaming strategy. The bondholder has an expectation concerning the added advantages that the equity holder could gain if he engages in opportunistic behaviour sooner than expected or at a more serious level. To the extent that bondholders anticipate this reactive behaviour, the ultimate result is that the market fails and no debt is issued.
- 15 This discussion is based on a paper by Titman (1982).
- 16 Titman (1982) argues that the firm bears these costs if it promises the outside associates that it will liquidate only when the liquidation value is in excess of the sum of the operating value and liquidation costs imposed on associates. Alternatively, the current prices of the services or products will reflect the imposed liquidation costs.
- 17 Another method would be to guarantee a high priority in the event of liquidation to the costs incurred by the associated parties. In order to prevent gaming strategies by these parties, the costs would have to be specified at the time of the contract; in addition, with a high probability of bankruptcy, it would be in the equity holder's interest to promise a large payment for liquidation costs and thereby increase the price paid for the product (or promote a lower wage). If the bankruptcy occurs and these payments have a high priority, equity holders will receive nothing, and it will be the bondholders that lose.

- 18 A complete discussion of this problem is presented in Brennan and Schwartz (1982).
- 19 The best solution to this problem concerning the wealth loss of equity holders would be for the bondholders to force bankruptcy and reorganize so that *they* become the equity holders. The investment decision could then be made and the underinvestment problem would be alleviated. However, the firm may not have violated any bond covenants, thereby rendering the receivership/ bankruptcy option unattainable. In addition, it would be impossible to enforce a covenant that required equity holders to make 'good' investments if these investments were detrimental to the current equity holder's wealth.
- 20 The costs of the various strategies will be different. Given that a new project should be undertaken (because its net present value is positive), the maximum amount that the government should incur would equal the net present value of the project, since this would reflect the net gains of the project to the economy. In the numerical example illustrated in Table 9, the net present value is \$8.57. Since the existing debt is highly risky, the new project would reduce the risk to such an extent that existing shareholders would lose \$10.42. To have current shareholders agree to finance the project, a cash payment of \$10.42 would thus be required; as this amount would be in excess of the gain of the project, intervention through this route is not optimal. However, there may be other strategies that would obtain the required results at a cost less than the net present value of the project.
- 21 See Brennan and Schwartz (1982) for a more detailed explanation of the alternatives available to the government.
- 22 See Halpern et al. (1983) for a discussion of the empirical evidence concerning the profitability of takeover bids to target and bidding companies.
- 23 This figure does not include approximately 125 resolved applications that were withdrawn after certification but before the decision by the Governor in Council.
- 24 See the statement by E. Lumley in *Toronto Star*, 6 August 1983.
- 25 There would be no need to include in the evaluation the value of any injection of new funds into the firm. The capital-market participants would only undertake the investment if the market value of

the stream of future cash flows was no less than the current price paid for the stream.

- 26 Nonetheless, managers will have incentives to use market-determined discount rates. If they use a discount rate that is less than the market rate, too many restructurings will be accepted, there will be a reduction in the market value of the shares of the creditor's firms, and the creditors will have trouble raising funds at the current interest rates. If the discount rate is too high, too few restructurings will be undertaken and the firm will have a reduction in potential profits. This also will affect stock prices.
- 27 We will not discuss at this point the problems that can arise from a difference between social and private benefits in a refinancing decision.
- 28 It is outside the scope of this study to present the position that the social discount rate will in general differ from the risk-free interest rate. The argument, however, is presented in Bailey and Jensen (1972).
- 29 This does not imply that all restructurings would be accepted. It would still be possible that the present value of the future cash flows would be less than the liquidation value even using a riskless rate of interest as the discount rate.
- 30 It is outside the scope of this study to comment on the specifics of this new legislation. However, it does have the effect of shifting wealth from shareholders (and creditors) to workers. This should result in higher interest rates on debt.
- 31 Section 2 of the Bankruptcy Act defines an 'insolvent person' as:

a person at least who is not bankrupt and who resides or carries on business in Canada, whose liabilities to creditors provable as claims under this Act amount to at least one thousand dollars, and (a) who is for any reason unable to meet his obligations as they generally become due, or (b) who has ceased paying his current obligations in the ordinary course of business as they generally become due; or (c) the aggregate of whose property is not, at a fair valuation sufficient, or, if disposed of at a fairly conducted sale under legal process, would not be sufficient to enable payment of all his obligations, due and accruing due.

Only an 'insolvent person' may initiate a voluntary bankruptcy proceeding or make a proposal for an arrangement with his creditors. See sections 21 and 32 of the Act.

- 32 One or more creditors may invoke the bankruptcy process when their debtor owes at least one thousand dollars and commits an 'act of bankruptcy' that may include: (a) failing to pay debts as they become due; (b) transfer of property by the debtor with intent to defeat or delay recovery by creditors; (c) allowing judgement debts to remain outstanding for more than two weeks after a writ of execution is issued; and (d) generally any conduct which indicates that the debtor is an 'insolvent person' as defined in section 2 of the Bankruptcy Act. See also note 1 above.
- 33 An agreement or voluntary settlement outside of the legal process regarding the disposition of an insolvent firm's assets that is made by unanimous consent of all the creditors and their debtor is usually referred to as a 'workout'.
- 34 See Bankruptcy Act, section 107 (governing the 'scheme of distribution' in bankruptcy proceedings) and section 41(4) (providing that distributions to creditors must respect the distributional scheme specified in section 107). See also *Re Masivor Corporation and Rainville v. Dep. Minister of Revenue* (1979), 30 C.B.R. (N.S.) 1979 (Que. S.C.).
- 35 Although trade creditors should be interested in maintaining their debtor-customer's viability, it can be argued that the average trade creditor is still ill-suited to provide a long-term financial commitment. The cost of converting a claim to a long-term interest through extensive negotiations and the benefit of an immediate cash repayment for a claim may often outweigh the uncertain benefit of increasing the long-run viability of a single customer. In large corporate insolvencies, major long-term creditors, such as banks, institutional investors, and public bondholders, would usually not expect the value of continuous, repeated dealings with the debtor to outweigh the expected benefit from allocating the debtor's assets to their highest-valued use. See Brudney (1974, 326-8).
- 36 Section 85 of the Act provides for class voting in bankruptcy proceedings and section 36(2) authorizes class voting on proposals. The Act does not prescribe any criteria for defining classes of

creditors, but it seems that the only plausible criterion would be the relative priority ranking of each creditor's claim.

- 37 Section 36 of the Act provides that the holders of at least 75 per cent of the claims of each class must vote in favour of a proposal.
- 38 Section 13 of the Act requires the trustee to report to creditors concerning the current state of the bankrupt firm's affairs.
- 39 For some experimental findings on the effect of repeat transactions, see Shapiro (1975).
- 40 See Bill C-17, A Bill for an Act Respecting Bankruptcy and Insolvency, introduced 31 January 1984 by Consumer and Corporate Affairs Canada. Section 120 of Bill C-17 would authorize a bankruptcy court to impose a reorganization plan even though the required majority of creditors fail to approve the proposal. The details of this proposed scheme will be described in Chapter 10 of this study.
- 41 Roe (1983) describes some recent US corporate reorganizations in which delays attributable to stalemated negotiations led to the loss of customers and suppliers. These losses are deadweight costs to the extent that they could have been avoided if strategic behaviour had not delayed the insolvency negotiations. See also *Wall Street Journal* (1983).
- 42 The extent to which these savings are passed on to consumers will depend on demand and supply elasticities in credit markets. See, e.g., Weston (1977).
- 43 Tom Jackson has pointed out that this situation presents a classic example of the 'prisoner's dilemma' problem in formal game theory (Jackson 1982, 862). For a general, nontechnical description of game theory, see J. Williams (1966).
- 44 For a discussion of the economic adjustment problems that result from corporate failure see Trebilcock, M. (1985) *The Political Economy of Economic Adjustment: The Case of Declining Sectors* U of T Press, chs. 1, 2 (Royal Commission on the Economic Union and Canada's Economic Development Prospects).
- 45 This may explain certain of the preferred claims for wages discussed in a later section is this chapter entitled 'Judicially enforced distribution scheme'.
- 46 This view is reflected in Bill C-17's 'cramdown' proposal (see fn. 38).

- 47 Since workout agreements are not matters of public record, no statistical data on their incidence among large firms is available. Discussions with experienced insolvency practitioners indicated that at least one-half of large firm insolvencies result in informal workouts, rather than proposals under the existing statutory scheme from interviews with Ronald McKinley of Clarkson and Gordon, Toronto, and John Honsberger of Raymond and Honsberger, Toronto, August 1983.
- 48 For a review of the literature, see Bogart (1983).
- 49 In fact, the reported cases indicate that the courts are generally reluctant to pursue questions of valuation in proposal proceedings. See Houlden and Morawetz (1982), 32-46.
- 50 The mortgage, indenture, or security agreement will usually contain express provisions that pass on to the debtor a secured party's expenses of collection.
- 51 See Canada (1979a) at 22-24; Fortin J.-Y, '*Creditor protection in Canadian bankruptcy: a banker's dream*'. (1985), *Comm. L. J.*, 90 53-59.
- 52 See the description of the voting rules in the following section in this chapter.
- 53 For a general discussion of strategies designed to overcome the free-rider problem, see Hardin (1983).
- 54 See *In re The Proposal of AM international Inc.*, 3 Sept. 1982 (Toronto: Clarkson Co. Ltd.); *In re the proposal of Wilanour Resources Ltd.* 14 April 1983 (Toronto: Clarkson Co. Ltd.).

5

Technical issues in measuring the benefits of bailouts

Chapters 3 and 4 considered the *potential* rationales for a bailout that emanate from basic principles of economic theory, especially those pertaining to possible sources of market failure. The purpose of this chapter is to discuss some of the technical and conceptual issues involved in assessing the employment benefits of bailouts. The costs of various forms of financial assistance will be considered in Chapter 6.

THE IMPORTANCE OF A COST-BENEFIT FRAMEWORK

Measuring the costs and benefits of bailouts can be important for a number of reasons. If the private market decides not to sustain a certain economic activity, this only tells us that the private market has deemed that the benefits to it are not worth the costs. The policy maker is still left with the task of ascertaining whether or not the *social* benefits (including externalities and redistributive consequences) exceed the social costs¹, so that a socially optimal public-sector decision can be made. Alternatively stated, in a market-oriented economy, identifying a possible source of market failure to sustain an efficient enterprise is only the first step in justifying public intervention. The second step is to ensure that the social benefits exceed the social costs. A negative *private* cost-benefit analysis does not necessarily indicate a positive *social* cost-benefit analysis.

Even without full knowledge of the social benefits and costs, knowledge of the private benefits and costs can be important in predicting the political pressure to secure the benefits or mitigate the costs of business bailouts. Such pressure will clearly be a function of the benefits and

costs that will accrue to the private parties (and of the problems of forming coalitions and exerting political pressure). Knowing the private benefits of a bailout (i.e., the prevention of income losses) would also provide information on the magnitude of the compensation necessary if there is no bailout but the state wants to support the income position of those who lose.

If quantification of the benefits and costs is not possible the cost-benefit framework may still provide the analyst with useful insights into some aspects of:

- real versus pecuniary or transfer benefits and costs;
- indirect benefits (e.g., reduced stress and psychological consequences);
- indirect costs (e.g., undesirable risk-taking emanating from the moral hazard problem);
- discounting (e.g., the benefits of a bailout are often immediate, the costs often subtle and occur in the future);
- the valuation of unemployed resources (e.g., the social opportunity cost of unemployed labour is *not* zero);
- the proper evaluation of sunk costs; and
- the determination of who *ultimately* benefits and who bears the costs.

Even if these components cannot be quantified and aggregated to arrive at an overall cost-benefit estimate, the quantification of some components and the qualitative assessment of others can be a valuable input into the political decision-making process. It may also help inform and educate the public so that informed public opinion can be brought to bear on these important political decisions. Also, even in situations where the decision is purely political and there are no long-run economic benefits it may still be useful to ascertain the costs of bailouts, if for no other reason than to forecast government budgetary requirements and to know the costs of attaining certain political objectives. The latter in turn may provide information on the most cost-effective way of attaining the political objectives and this may suggest either alternative policies that can attain the objectives in a more cost-effective fashion or complementary policies that may reduce the cost of using the bailout as a policy instrument.

Clearly the cost-benefit framework can be a useful input in this important policy area even if a formal quantitative cost-benefit analysis cannot be performed. The purpose of this chapter is to discuss some of the

measurement issues that can arise in applying cost-benefit analysis to the bailout decision.² Fortunately our task is assisted by a considerable Canadian literature dealing with the analysis of industrial projects as well as labour-adjustment consequences of free-trade policies (e.g., Evans 1983 and Glenday 1982 and the earlier references therein, and Glenday and Jenkins 1981 for a nontechnical overview of some of the issues).

In our discussion of the measurement issues we focus on the net employment *benefits* that emanate from sustaining jobs. The measurement *cost* issues discussed focus on the valuation of the bailout subsidy (e.g., grant, loan, loan guarantee). The benefit side therefore emphasizes labour-market issues and the cost side emphasizes financial issues. Concentrating on the income consequences of sustaining jobs is not meant to downplay the psychological effects or the consequences to communities that are struck by large job losses.³ However, income losses are important; they have been emphasized in much of the existing literature and they illustrate many of the principles involved in the cost-benefit assessment, whether or not that assessment contains a qualitative or quantitative evaluation of the important noneconomic and community responses.

EMPLOYMENT BENEFITS OF BAILOUTS

In many instances the expected benefits of the bailout largely relate to employment because workers will not lose their job and be displaced to their next-best-alternative, possibly a period of unemployment and/or lower earnings (the latter reflecting a combination of lower wages and/or time employed). As discussed in Chapter 3, such an income loss can involve a loss of real resources, or a transfer or redistribution of income, often through price changes. This consideration of *expected* earnings also highlights the uncertainty of the bailout's ultimate success.

Determining the magnitude of that income loss can be important because it indicates the *amount* of the bailout that would be appropriate if the government wants to preserve the expected income of workers relative to their next-best-alternative. This requires a method of ascertaining what would happen to workers if there were no bailout and they were displaced to their next-best-alternative. Estimating this hypothetical alternative or counterfactual situation is certainly more difficult than estimating *actual* income losses that occur when there is no bailout

and plants close. In the latter situation one often has *actual* information on the income of workers both before and after the closing.

Conceptually, however, there are at least three general procedures that the analyst could use in attempting to measure the *expected* income losses in the absence of a bailout: (1) estimate next-best-alternative earnings; (2) apply adjustment factors from other analysis; and (3) focus on specific market failures.

Estimate next-best-alternative earnings

The expected loss of labour-market earnings if there is no bailout is the difference between the workers' *actual* earnings in jobs preserved by the bailout and their *hypothetical* earnings if there is no bailout and they are displaced to their next-best alternative. Data on the actual earnings of individual workers at the time of the proposed bailout are available from the personnel department of the company, and could be made a condition of the bailout request.⁴ Certain adjustments (to be discussed later) may have to be made to ensure that these actual earnings reflect what workers would expect to earn if the bailout is forthcoming. Nevertheless, these actual earnings, especially for full-time workers, are a good indication of what workers can expect to continue to earn in the bailout situation.

The more difficult problem is the estimation of the hypothetical alternative of what workers could be expected to earn if there were no bailout and they were displaced to their next-best alternative. The conceptual and measurement issues involved in ascertaining this next-best-alternative income stream or the opportunity cost of labour have been extensively discussed and developed (e.g., Evans 1978 and 1983, ch. 13; Glenday 1982, ch. 2; Harberger 1971; Jenkins and Montmarquette 1979; Jenkins et al. 1978); these developments will be relied upon here.

Private income in alternative states

To measure the private losses (to predict political pressure or to calculate compensation requirements), it is necessary to ascertain the workers' expected full income in the next-best-alternative activities. Full income can be defined as the proportion of time spent in labour-market activities times the wage in such activities plus the remaining proportion of time spent in nonlabour-market activities (e.g., job search unemployment, leisure) times an imputed valuation for these activities. The calculation

for *private* income losses to labour involves not only a valuation for pure leisure but also the inclusion of unemployment-insurance benefits for the proportion of time a worker is unemployed. All calculations are net of taxes since this is relevant for private consideration.

More refined calculations would also include transfer, psychic, and other costs of being unemployed or changing jobs, other income changes (e.g., value of housing, private relocation and retraining costs) and adjustments for nonwage aspects of work (e.g., working conditions) and living conditions. This highlights the fact that full income, even though it includes an imputed value to nonlabour-market activities, does not equal utility (although it may not be a bad approximation). For example, a worker who relocates, even to a full-time job at the same wage, may experience a drop in utility because of retraining and relocation costs or if some of the alternative wage was a compensating wage for undesirable working or living conditions.

In the private calculations, consideration can also be given to the possibility that workers may earn rents in their current job relative to their next-best alternative, whether that alternative is leisure or another job. Such rents (discussed in more detail subsequently) can emanate, for example, from union or legislative wage-fixing, specific human capital, or from high wage policies of certain firms. (These factors could contribute to costly inputs and hence the need for bailouts.) Such losses of rents are a real private cost to individual workers. However, as transfers they may have no implications for the efficient allocation of resources; that is, they could be reduced without affecting the worker's decision to allocate labour to other jobs or to leisure (although they may affect the decision to lobby).

Imputation for the leisure component of not working in the labour market can be made in a variety of ways, depending upon the particular groups of workers involved. For example, for workers who retire, it can be assumed that their valuation of retirement leisure is at least as high as their expected alternative income net of taxes. For other groups, alternative assumptions could be made. For example, Rea (1974) estimated approximately half of the unemployed time of females and single males to be leisure as opposed to job search while for married males whose wives did not work, the leisure component was essentially zero.

Private income loss

The difference between the workers' expected full income in this original or base-case state with a bailout and their expected full income without a bailout is the private loss that workers could expect to incur if there were no bailout. For *some* workers this 'loss' may be a gain. This is generally unlikely since they would have moved to their higher-income alternative. However, for some, especially younger workers, wage gains are more likely because they have not always yet found their highest-wage or full-income activity. Also, if concession bargaining becomes a condition of the bailout, wage gains in alternative activities become more likely.

Avoidance of this expected private income loss is a measure of the private benefit that workers could expect to receive from a bailout. Hence, it would indicate the amount of compensation required to make them indifferent between their full income in the bailout and no-bailout states. For example, if the financial cost of the bailout would be greater than these private benefits, it may be more efficient for the state to simply compensate the workers for all, or some portion of, their income loss, adjusted for any stigma associated with the compensation.⁵

Knowledge of this income loss or private benefit may also be useful to predict the *sources* of political pressure from workers for a bailout. To the extent that such private income losses are likely to be greater for older workers (especially those with dependents), and for communities in periods of high unemployment, the political pressure for bailouts can be expected to be greater from such sources.

Economic calculation of labour externality

The above discussion referred to the *private* income losses that workers could expect if there were no bailout and they were displaced to their next-best-alternative activity. Such private losses are part of the *economic* losses to the economy as a whole, excluding transfers (including rent distribution) and taxes (which represent only distributional changes in that what one party gains another party loses). In *social*, as opposed to economic calculations, such distributional changes could be considered by attaching different weights to the income of different individuals.⁶ Thus, the economic calculations exclude unemployment insurance and other transfers as well as taxes. This relationship between the private income losses and the economic losses is easier to see in a partial-equili-

brium than in a general-equilibrium framework, since in the latter case the workers who ultimately adjust can differ from those who were laid off.

The labour externality, or loss of labour income to the economy in this calculation, is simply the difference between the expected full income in the bailout (*before* or gross of taxes and transfers, but including a valuation of leisure) as opposed to alternative states. The rents that accrue to labour are still part of the *labour* externality so defined; however, they are a transfer externality from the point of view of the economy as a whole because their gain to labour represents a potential loss to others. For example, if all of the expected income loss before taxes and transfers represented a loss of rents (e.g., a union-nonunion wage advantage) then this loss would be a gain to employers in the alternative activity since they would be paying the lower (e.g., nonunion) wages for the same input. The loss to workers would be a gain to employers. If this were all rents then by definition it would have no *direct* effect on the efficient allocation of labour, although it can have important effects on the distribution of income.

Refinements of the economic costs and benefits could also be made by correcting for the welfare implications of distortions in related markets.⁷ The true labour externality, for example, is lower if its original existence was dependent upon tariff protection (Glenday and Jenkins 1981, 38) and, as indicated by Glenday (1982, 173), it can certainly be negative in industries that are heavily protected. The term *net* labour externality has been applied to the gross labour externality after it is adjusted for product market distortions like tariff protection.

Simulating hypothetical alternatives from general workforce

Clearly the most difficult problem in the estimation of income losses to workers and to the economy as a whole is the estimation of what workers could be expected to earn if there were no bailout. This could be *simulated*, however, if one had information on both the actual characteristics of the workforce in the bailout situation and earnings equations estimated from workers elsewhere.

The simulation could proceed as follows. From actual data on workers in the economy, estimate an earnings equation by regressing their earnings on their various personal, human-capital, and job characteristics (age, sex, marital status, education, training, hours worked,

industry, occupation, and location). The resulting estimated regression coefficients indicate the additional earnings associated with changes in the worker or job characteristics; they are the market returns for the characteristics. Hence, multiplying these coefficients by the actual values of the characteristics of the workers in the bailout situation would give their expected earnings if they received the market returns that others receive for these characteristics. This would be an estimate of their expected alternative wage based on what they could expect to earn on average from the general labour market, given their own particular characteristics.

The simulation exercise could be altered to reflect various possible scenarios. If the alternative jobs were likely to be restricted to the same region or to particular industries or occupations then the displaced workers could be 'allocated' accordingly in the simulation (i.e., they would be given the regression coefficient for that designation) and their expected alternative earnings would be estimated based on these alternative assumptions. This could provide a 'sensitivity' analysis of different alternative income estimates based on different assumptions about what would happen to displaced workers, given their characteristics.

The simulation exercises also could be made more sophisticated by incorporating the different expected responses of different workers if they are displaced to their next-best alternatives because no bailout is forthcoming. Such responses include moving to another job (permanent or temporary), and withdrawal from the labour force (usually to retirement, to the household or perhaps to educational institutions), often with periods of unemployment in between. The loss of income associated with periods of unemployment, or if the new job is lost, could be incorporated by evaluating the expected alternative income as the expected wage in the new job times the probability of obtaining and retaining that job. Such refinements would also have to be made to the expected income in the bailout situation since periods of unemployment are possible.⁸ To a certain extent the need for such refinements may be obviated somewhat if the simulations of alternative earnings are based on earnings equations using annual earnings (rather than hourly wages) to reflect periods of unemployment or temporary jobs. Nevertheless, the period of unemployment associated with workers' displacement if there were no bailout is certainly going to be higher than that experienced by most workers, and the cost of this would have to be assessed. The

unemployment experience of displaced workers will also vary according to worker characteristics. For example, young male, highly skilled workers will likely experience very little unemployment.

Simulating hypothetical alternatives from leavers

As an alternative to using earnings equations based on workers in the *general* workforce it may be possible to estimate an earnings equation from the subsample of workers who *did* leave by using their pay structure to simulate what the remaining workers could expect to earn if there were no bailout and they also left. If the workers who left early could be identified they could be surveyed, or perhaps their labour-market experience could be ascertained from unemployment-insurance and income-tax data or from labour-force tracking data⁹, although such data sets are not readily available for recent years.

Even if information could be obtained on those workers who left before the bailout, such information is not likely to be representative for those who remained and would be displaced by the bailout. Those who left likely did so because they were the ones with the best alternatives elsewhere and the smallest firm or industry 'rents'; their income loss is likely to be a lower bound for those who did not leave.

Formally, this is a problem of sample-selection bias that arises because the group from which estimates are obtained is not a random sample from the population for which estimates are to be inferred. There are statistical procedures for 'correcting' for the bias which for bailouts would involve estimating the determinants of being in the subsample (i.e., having left before the bailout) and using this to derive a 'correction factor' to be added to their earnings equation. Using such an earnings equation to simulate the expected earnings for those who would be displaced without a bailout essentially involves giving them the earnings of those who left early. Further, these earnings must be adjusted for the differences in measured characteristics between the groups, and corrected for unobserved differences that cannot be measured but may account for why some workers left early.

Other simulation problems

Clearly such procedures for *estimating* the hypothetical alternative income to workers displaced in the absence of a bailout is not an easy and straightforward task. Further, there are other problems associated with

this procedure. Extensive data sets to estimate earnings equations are not readily available and are often dated.¹⁰ One could simulate simpler alternatives by giving displaced workers the average wage of the industry, occupation, and community in which they are likely to work.¹¹ Nevertheless such crude simulations are not able to account for specific differences in the characteristics of the workers in the bailout situation or their employment alternatives which are extremely difficult to establish.

Applications and illustrations

While these procedures involving the *estimation* of the hypothetical earnings that workers can expect to receive if there is no bailout are not without their conceptual and practical difficulties, they have been applied in other studies to measure the private and economy-wide income losses associated with worker displacement emanating from tariff reductions. Further, the methodology has been *cumulative*, including such developments as estimating the probability of obtaining as well as retaining a new job, the indirect effect on other workers, the multiplier effect throughout the economy, the differential effect of saving permanent and temporary jobs, and the effect of migration and changes in working and living conditions.

As an illustration, Jenkins et al. (1978)¹² have estimated the expected income loss of displaced workers in two case studies that were subject to trade liberalization (one in Owen Sound, Ontario, the other in Sherbrooke, Quebec). The estimates were based on two alternative data sources: the *Labour Force Tracking Survey* of Industry, Trade and Commerce which documented the actual labour-market experience of many of the *specific* workers separated from their jobs in the two plants; and the Unemployment Insurance Commission's Longitudinal Data Base which traced the labour-force experience of workers in general who were separated from their jobs in the same regions.

Private income losses were calculated from the perspective of the workers themselves (i.e., based on *after-tax* calculations of wages, unemployment insurance and any monetary value of leisure when unemployed) and *economic* losses were calculated for the economy as a whole (to exclude taxes and unemployment insurance since they represent transfers and not losses of real sources).

Analysis indicates that the present value of private full-income losses over three years in 1977 dollars (including a valuation for different amounts of leisure) was \$2,115 for workers in Sherbrooke and \$4,797 for workers in Owen Sound and that these losses respectively were 10 and 15 per cent of the workers' wages prior to layoff (ibid., 248). They suggest (246) that these bounds likely represent the range of income losses that workers in general can expect to experience since the two companies represented polar cases (the higher 15 per cent loss occurring in situations with older, higher paid, and permanent workers and the lower 10 per cent bound in situations with relatively younger, lower-paid, and temporary workers).

Their calculations also provide information on the sensitivity of the results to other conditions. Specifically, they indicate that the private loss tends to persist for about five years (222, fn. 33) and thereafter it becomes negligible as the income in one's next-best alternative begins to equal the income in the lost job. In addition, the private income losses tend to emanate more from the increased unemployment than the reduction in wages (115) and they are higher for older workers and when the aggregate unemployment rate is high (119).¹³

For the economy as a whole the income loss associated with labour displacement is larger, being magnified by such things as indirect employment effects on other workers, increases in transfer payments, reduction in taxes, and multiplier effects through the economy.¹⁴ The costs are also larger when permanent as opposed to temporary jobs are lost. Specifically, the economic loss (forgone labour externality) to the region, cumulated ten years after the layoff and in 1971 dollars, is estimated to be approximately \$25,000 per laid-off worker or approximately 48 per cent of the former wage bill in Owen Sound and \$21,000 per worker or 43 per cent of the former wage bill in Sherbrooke. These calculations only reflect the income loss associated with labour displacement; other costs associated with moving and retraining would be added where necessary.

Applying this type of methodology to data on *individual* workers obtained from the personnel records of companies requesting a bailout is a possible procedure for qualifying the expected benefits resulting from preventing workers being displaced to their next-best-alternative activity. Such an analysis could be done at the time of the bailout request to ascertain the expected employment-related benefits, or it

could be done after the bailout (if historical personnel information were still available) for an *ex post* evaluation.

Evans (1983, ch. 13) illustrates how the labour externality from delaying layoffs (e.g., a bailout) could be calculated from existing computer simulation models as utilized by the federal Department of Industry, Trade and Commerce. He also indicates (499), however, that in addition to access to and understanding of such models, their use requires considerable data. Data is required to provide current estimates of both the parameters of the simulation models and detailed information on the *individual* personal and labour-market characteristics of workers involved in bailout situations. For these reasons and others, the search for alternative estimation procedures continues.

Apply adjustment factors from other analyses

There is a simpler alternative to these more elaborate procedures for estimating the next-best alternative of displaced workers. By applying some of the estimates obtained from these more comprehensive studies to *aggregate* data from particular bailout cases and modifying them to the peculiarities of a bailout situation it would be possible to get an estimate of the consequences for displaced workers if there were no bailout. Empirical evidence on income losses of displaced workers could come, for example, from studies on the effects of free trade¹⁵ or plant closings.¹⁶ The percentage reduction in the income of workers in such situations could be applied to workers in bailout situations, modified to account for any obvious differences between the expected adjustments in the different sectors. This is facilitated because the comprehensive studies often performed sensitivity analyses, providing a range of estimates for different hypothetical conditions.¹⁷

For example, if the previously discussed 10 to 15 per cent private income losses were deemed to encompass the relevant range of losses that displaced workers could expect to experience, these percentages could be multiplied by their earnings at the time of the bailout to get the expected income losses if there were no bailouts. The higher figure from the 15 per cent loss could be used as an upper bound, likely to occur for workers who are older, in permanent jobs and when unemployment is high. The economic losses to the regional economy (approximately 45 per cent of the wage bill at the time of the bailout) could be similarly estimated, although here the estimates are less likely to be as reliable; they depend

upon assumptions concerning such factors as effects on the employment of others, transfer savings, income-tax losses, regional income multipliers, the length of the adjustment process, the aggregate state of the economy, and the effect of wage fixing above competitive wages.

Saunders (1984, 18) illustrates such a calculation based on estimates given in Glenday, Jenkins, and Evans (1982) of the gross economic benefits from saving a job in the textile industry in Sherbrooke, Quebec. The average benefits were at most 36 per cent of the worker's wage which, for an average income in 1978 of \$11,200, yielded a gross benefit of maintaining a job of approximately \$20,000 in present-value terms. This was considerably less than their estimated cost of \$30,400 per job from the efficiency losses of trade restriction.

In addition to a range of income-loss measures, the existing literature does provide some information on the magnitude of the savings in transfer payments and tax receipts associated with preserving jobs. Bluestone and Harrison (198, 73-75), for example, cite evidence of a loss of taxes of \$1,136 associated with a loss of a \$10,000 job and a combined tax loss and transfer-payment increase of \$15,000 to \$17,000 per displaced worker. Reid (1983, 18-20) also provides some rough calculations (based on Brenner's (1976) estimates of the loss of output and expenses in prisons and hospitals associated with higher unemployment) to illustrate that these social costs amounted to at least 25 per cent of the costs of conventional unemployment insurance. This could be added to any cost saving from the reduced need for unemployment insurance.

The point of such an exercise is not so much to provide precise estimates of the extent of the expected income losses to workers and to the economy – although such estimates are theoretically possible – but rather to indicate plausible magnitudes and more importantly to illustrate that extremes are unlikely. If there is no bailout and workers are displaced, not all of their income is lost since they do have alternatives. However, their income loss is also not zero and their next-best alternative does entail both a private income loss and a loss to the economy and society as a whole.

An important issue remains. Are the adverse consequences greater in the long run if labour is not reallocated to its most efficient activities? The social consequences of this possibility are seldom if ever included or discussed in the studies that attempt to quantify the noneconomic consequences of displaced labour. Labour adjustment obviously creates very real costs; nevertheless thwarting that adjustment ultimately may

create even greater adjustment costs if labour continues to be engaged in activities that are not valued in the market. The real policy issue becomes one of ensuring that the necessary ultimate adjustment occurs in the least costly and disruptive fashion.

Evans (1983, ch. 13) also indicates how such adjustment factors could be applied in a more systematic fashion based on the previously discussed computer simulation models. Such models could be used to provide estimates of the labour externality or income loss that would be expected from the average permanent sector job in communities for which the required data is available. This *average* expected loss could then be adjusted to reflect the situation of the particular bailout such as:

- the type of job (wage, job permanency, skill shortages, job duration);
- the type of regional labour market (wage and employment rates, adjustments through migration, participation and filling of vacancies, and regional multipliers);
- the type of worker; and
- the cyclical stage of the economy.

The use of such adjustment factors requires access to the information available from the simulation models to get the *average* expected loss and the appropriate adjustment coefficient for each of the relevant characteristics. Nevertheless, this is considerably easier than utilizing *individual* information for each worker involved in a bailout to simulate their individual expected income loss and to aggregate the total loss. Further, such information on the average expected losses and the relevant adjustment coefficients could be developed on a comprehensive regional basis, with updated, revised and extended information (on additional adjustment factors) being made available as resources permit. This would enable the analyst to approximate quickly the expected income losses of workers if there is no bailout (or, for that matter, if there is a plant closing or a displacement of workers due to free trade) and to see the main factors (adjustment coefficients) that contribute to these losses.

Market-failure analysis

The previously discussed techniques for measuring the income loss (and hence the appropriate amount of a bailout to preserve the original

income if that is desired) basically involve procedures to estimate, directly or indirectly, the next-best-alternative income opportunities for workers so as to subtract this from their existing full income to get a measure of the income loss. While such a calculation can be informative it can be subject to errors because it is a *residual* calculation based on the *estimation* of the next-best-alternative income opportunities for workers. In addition, there are conceptual problems associated with the extent to which some of the income loss represents a loss of rents that do not have efficiency implications or a loss of tax revenues that are offset by associated reductions in public expenditures (albeit there is no guarantee that a loss of tax revenues implies a reduction in public expenditures).

As an alternative to these procedures for estimating any market failure that can be attributed to the income loss, it would be possible to focus directly on the specific factors that, in theory and in practice, could give rise to a failure of the market to evaluate properly the social costs and benefits of a bailout. This may be particularly appropriate for the analysis of bailouts because they involve companies that already exist and market evaluations are already available. In such circumstances the analyst can rely on the fact that *competitive* markets would ensure that the net benefits (including producer and consumer surplus) associated with the existence of the company were already maximized by the profit-maximizing action of firms and utility-maximizing actions of workers. Therefore it would not be necessary to attempt the difficult task of measuring the costs and benefits or determining the extent to which they are real or involve transfers of rents.

This contrasts with some large public-project evaluations (e.g., airports, roads, or dams) or with requests for venture capital to start new enterprises (e.g., high-technology development) where market evaluations of the particular projects do not already exist and hence a cost-benefit analysis must be done. In such circumstances producer and consumer surplus benefits would be included and would be relevant for the efficiency decision as to whether or not to invest in the project and continue to do so until the net benefits (benefits minus costs are equivalent to the sum of consumer and producer surplus) is exhausted. (Evans 1983, ch. 9).

The latter conditions correspond to the efficiency decision that the private market would make if it were to undertake the project. Hence, using the private-market information where it is available (for bailouts but not for public projects like dams or roads) provides the analyst with

invaluable information on the market participants' assessment of the value of the firm. The issue then becomes one of identifying the specific sources of market failure whereby these private-market calculations may not be socially optimal.

In essence, the market-failure assessment would not rely on the public-sector project analyst performing a cost-benefit calculation by estimating all of the costs and benefits, including rents or seller's surplus. Rather it would assume that such calculations are best done by the market (except for *specific* sources of market failure), and the decision to continue investing will be made as long as the *private* benefits exceed the private costs sufficiently to make the venture profitable. The key issue becomes one of identifying the *specific* sources of market failure that prevent *private* calculations being considered socially optimal.

This market-failure assessment is consistent with the decision-tree process, discussed in Evans (1983, 681), Glenday (1982, 17-21), and Glenday and Jenkins (1981, 37), for government analysts when approached for assistance to prevent closures and associated layoffs. They suggest first an economic-efficiency analysis to see if the firm is attractive from the perspective of the economy as a whole. If it is not, then the firm should be allowed to contract or close with workers who are laid off being eligible for compensation or re-employment assistance. However, if the firm is economically desirable for the economy as a whole the second step is a private-investment analysis to see if it is attractive for private investors. If it is, then no assistance should be given (presumably the firms were bluffing in their threat to close or they were simply incorrect in their assessment of their own situation). However, if from a private perspective the firm is genuinely insolvent, then for the economy as a whole, assistance can be justified. This procedure requires both an economic-efficiency analysis from the public perspective of the economy as a whole (step 1) and a private-investment analysis from the perspective of private investors (step 2).

The firm will be economically viable from the perspective of the economy as a whole (i.e., passes step 1) but not privately profitable (i.e. fails step 2) only if the private market fails to properly account for all the costs and benefits to the economy as a whole. Focusing directly on the specific sources of market failure, therefore, captures the essence of what the public decision-maker is after – the *divergence* or net difference between private and social costs and benefits. This market-failure perspective presumes that the private-investment analysis is best done

by the specific pinpointing of the sources of market failure. This makes maximum use of the information provided by the private market and it allows for the possibility of government intervention only when the specific sources of private-market failure are identified for each particular case. In essence, in a market-oriented economy, in the absence of a well-defined, specific market failure the private market is presumed to yield the socially optimal outcome.¹⁸ Justification for a bailout would then hinge upon the specific identification of the market failure.

ADDITIONAL INCOME-LOSS MEASUREMENT ISSUES

Throughout the discussion of measuring income losses of displaced workers, reference was made to numerous conceptual and practical measurement problems. Two additional but interrelated questions merit explicit consideration, in part because they lurk beneath the surface of many of the other measurement issues. The questions are: how can income-loss measures be made at a point in time when wages do not always reflect productivity at a point in time, in part because of deferred compensation? And, if displaced workers incur a large drop in income, how can such 'rents' have existed?

Our analysis will indicate that wage losses can emanate from losses in deferred compensation, specific human capital, or the compensating wage premium associated with the risk of bankruptcy in the original job. Such losses are not simply rents; they are the loss of compensating wages paid for past contributions to productivity, reduced turnover, and risk of job loss. Rents, however, can be involved for workers of different reservation wages or when wages are fixed above the competitive norm.

Divergence between compensation and productivity profile

Standard competitive labour-market analysis implies that firms will hire workers until their wage (total compensation) just equals the value of the additional output associated with an additional unit of labour (value of marginal product). This leads to the implication that workers' wages will be equal to their (marginal) productivity. However, this may not be the case, at every point in time. A more efficient compensation scheme may involve a deferred-wage profile whereby workers are paid a wage below their productivity when they are younger and above their productivity when they are older, with the equilibrium condition of the

expected net present value of the compensation and productivity *streams* being equal.

Rationale for divergence

Such a compensation scheme may be efficient from the perspective of employers because the employer controls payment of the deferred compensation and this encourages honesty and effort from employees and reduces the need for constant monitoring. The prevalence of deferred compensation can also reduce unwanted turnover and enable the firm to amortize its quasi-fixed hiring and training costs over a longer period; also it can provide workers with an interest in the financial solvency of the firm so that deferred wages including pensions will be paid. Workers in turn may accept such a deferred-wage system because the associated efficiency gains enable employers to pay higher wages; it reduces the need for everyday monitoring; and the 'forced savings' including the pension component may correspond with their lifetime consumption and saving preferences. Also, the existence of such a deferred compensation scheme requires implicit or explicit contractual arrangements between firms and workers to ensure that deferred wages are paid (otherwise employers would lay off workers at the age when their wages begin to exceed their productivity). Workers may prefer such arrangements since they can include seniority provisions, due process, severance pay (as a 'buy-out' of the deferred wage), and union protection, all of which are associated with deferred wages.

Effect on income loss

The existence of deferred wages implies that workers who lose their jobs will also lose their deferred wages possibly including nonwage items such as pension entitlements, seniority rights and vacation rights.¹⁹ New employers who hire these displaced workers do not have to honour these 'rights' since they were part of the old implicit or explicit contractual arrangement. In essence, new employers would hire the displaced workers at a wage that more closely approximated their *current* productivity, rather than at their wage in their original job if it had a deferred-wage component over and above their current productivity.

To a certain extent in the case of plant closings the loss of deferred wages for older workers may be offset somewhat by the fact that some younger workers may gain, because their wages were higher than their

productivity during training and they do not have to 'pay this back' to the firm. Such an offset is unlikely, however, if firms that are requesting a bailout tend to have few younger workers or to have provided them with subsidized training. This is likely to be the case in the declining sectors which are the source of many bailout requests.

The more likely factor mitigating against the large loss of deferred wages is that workers are unlikely to accept a deferred wage compensation scheme if the ability of the firm to meet these obligations is in jeopardy. If they do accept such compensation arrangements it is likely to be associated with a higher risk premium (the likelihood of job loss).

In essence the income loss associated with the loss of deferred wages would be large if bankruptcy is *unanticipated* which is more likely if bailouts become an expected response. The possibility is also enhanced because employers are likely to try to disguise any need for a bailout except as a last resort, in part to preserve customer confidence and worker morale (and the willingness of workers to accept deferred compensation).

Implications for measuring the income loss

The possibility of deferred wages raises a number of implications for the measurement of income losses associated with workers who may be displaced to their next-best alternative if there is no bailout. First, the loss of deferred wages is likely to exist in situations where the need for the bailout is unanticipated and where factors associated with deferred wages (e.g., seniority, pensions, mandatory retirement, union protection) are prevalent. Second, the *annual* losses are likely to be higher for older workers, although those near retirement obviously are unlikely to experience losses for a long period. Third, even though the wage in the current job is higher than their next-best alternative, these losses are not simply a loss of rents; rather, they are a loss of deferred wages for past contributions to productivity.

When payment of deferred wages is uncertain workers will be reluctant to accept deferred compensation schemes and their efficiency will be lost. This may be optimal; such compensation schemes may no longer be viable in a world of increased uncertainty and bankruptcy. In addition, the existence of deferred wages may raise the possibility that firms may go bankrupt *to avoid payment of deferred wages or to win wage concessions*. This may be an intentional policy, especially if they could relocate elsewhere and hire younger workers whose productivity exceeds

their current wage. Or, it may be unintentional, if a firm in a declining market and with an older workforce finds itself with high current and even higher future wage costs relative to the current and expected future productivity of its aging workforce.

Whether intentional or unintentional on the part of firms, workers can find themselves with both the large *ex post* losses of deferred compensation and severe psychological adjustment problems. To a certain extent they may already have been compensated for the risk by a higher *ex ante* wage premium associated with the possibility of the loss, and to a certain extent it may reflect their 'mistake' for having accepted some compensation in deferred form. Whatever the source of the loss and its ultimate effects, it clearly has implications for the measurement of income losses associated with job changes. This may result in political pressure for both compensation for those losses and a change in the order of workers' claims under bankruptcy.

Income loss and rents

A related measurement issue is the apparently large component of economic rent (defined as payment in excess of one's next-best alternative) in the income-loss measures. If rents are prevalent, how can they be sustained in the long-run when forces of competitive wage reflecting their next-best alternative, be it labour-market or household work? A number of possible answers suggest themselves, yet they pose thorny issues for the measurement and implications of income losses for displaced workers.

Deferred wages

As suggested previously, this loss of deferred wages may give the appearance of a rent because if current wages reflect a deferred-wage component, they can be considerably higher than wages in the next-best alternative. In reality, however, those higher wages may reflect deferred compensation for past contributions to productivity, rather than rent or excessive payments. However, the extent to which such deferred wages prevail in situations where they are at extreme risk remains a debatable question.

Risk premium

The higher wage associated with one's current job as opposed to one's next-best alternative may also reflect a risk premium associated with the high probability of a job loss, and this risk premium may be especially high if deferred wages may also be lost. Again, such high wages are not rents but rather compensating wage premiums associated with the risk of job loss. Such compensating wages could be associated with any other undesirable job characteristic. The 'certainty equivalent' in the case of risk, or 'net advantage' in the case of all job characteristics may very well be equalized by competitive forces across all alternative activities. In fact, the compensating wage is the equalizing mechanism.

As discussed previously, in making income-loss calculations it is important to control for all nonpecuniary differences across activities because they may be offset (or augmented) by nonpecuniary changes. In addition, compensating workers *ex post* for their income loss may be double compensation.

Specific human capital

Large income losses may also be associated with the loss of specific human capital that may have a value-in-use that is higher in the current job than in alternative activities. This could emanate from industry- or firm-specific skills or training that have low productivity and hence command low wages elsewhere.

The theory of human capital, however, suggests that such *specific* skill and training acquisition will be paid for by firms rather than by employees; the latter could not guarantee they could reap the benefits by commanding a higher market wage because the skill, by definition, is not usable elsewhere. Workers would pay only for training that is *generally* usable elsewhere and from which they could reap the benefits through a competitive market wage. Thus, in theory, workers should not experience much income loss from skill losses. If their skills are generally usable they will be compensated in the alternative activity and if their skills are firm- or industry-specific their current wage will not be higher than their alternative wage.

In contrast, *firms* that close or industries that decline may not be able to recoup their investment in firm- or industry-specific human capital. However, this is part and parcel of their private investment decision.²⁰

Also, if the training or skills have no alternative use, they should be regarded as 'sunk costs' irrelevant to the continuation of the operation.

By way of digression, this also applies to community infrastructure that may be lost if there is no bailout and plants close. If such infrastructure has alternative uses it should be able to attract alternative business,²¹ perhaps by lowering prices (e.g., by granting tax concessions or free services or other subsidies necessary to attract business). In that vein, what appears to be 'ruinous' competition on the part of communities for new business may be rational price adjustments reflecting the opportunity cost of a community's social infrastructure. If it has no viable alternative uses, its social opportunity cost is zero and it should be regarded again as a sunk cost, irrelevant to the continuation decision.

In reality, the distinctions between general and specific training, between who ultimately gets the benefits and pays the cost, as well as the determination of sunk costs, become blurred in practice. Most training and skill acquisition has both general and specific components and workers and employers share the benefits, costs, *and* the income losses. Even for purely company-specific training, employers may pay higher-than-market wages to reduce turnover and amortize their training costs. Workers in these situations would receive wages in excess of their next-best-alternative activity. However, such 'rents' do have efficiency implications; they reduce costly turnover.

Team versus individual productivity

A type of firm-specific human capital can arise when the aggregate productivity of a work group as they interact together is greater than the sum of their individual productivity. This occurs as workers learn to work together, imparting training to each other. Such externalities can be internalized by rewarding those workers who help the productivity of others and by bringing together work teams that generate the greatest productivity.

This can mean, however, that when work teams are disbanded through mass layoffs or closures, individual workers who move elsewhere may get a lower wage reflecting their *individual* productivity rather than their share of their former *group* productivity. This can be mitigated by new employers paying a premium for known team workers or by hiring the whole team (perhaps by coming in to the work environment where the team already exists), but such group hirings are

not always feasible. The income loss may also be mitigated by the fact that employers may *not* have paid the employees their share of the value of the group productivity. As with company-specific training, however, the gains are likely to be shared to prevent turnover; income losses can occur as workers are displaced to their next-best alternative reflecting their individual rather than group productivity.

High-wage firms

In fact, such income losses may be associated with any 'high wage' policies followed by particular firms. Such wage policies may be perfectly rational and persist even in competitive labour markets for firms that want low turnover, large queues of applicants or perhaps high morale. Such 'rents' are efficient and sustained in the market; they are simply the byproduct of a particular pricing mechanism.

The loss of such rents can represent a real income loss to workers, but losses are unlikely to be large in the private market in the long run. Knowing that they can pay workers a wage equal to the value of their next-best-alternative activity, employers are unlikely voluntarily to pay much more, even to secure the advantages of being a high-wage employer. Alternatively stated, in the long run high-wage employers will be able to 'squeeze the rents' by hiring the most productive from the queue of applicants and by extracting additional effort from those of its existing workforce who are reluctant to leave.²²

Intramarginal workers and individual rents

It is not always possible, even in what appears to be a relatively homogeneous workforce, for employers to know each worker's next-best alternative and hence to price discriminate and extract the rents. Such workers, especially over time, can receive a seller's surplus by receiving a market-determined wage that is higher than their reservation wage (the value of their next-best-alternative activity).

The competitive wage is the minimum necessary to attract additional workers, at the margin, into the industry. It increases as new workers into the industry are hired (i.e., the labour supply curve to the industry is upward sloping) because a higher wage is necessary to attract them from their next-best-alternative activity. However, to the extent that employers are unable to differentiate their new hires from their existing

workers, the existing intramarginal workers will receive the higher wage, some of which will be a rent relative to their next-best alternative.

In these circumstances intramarginal workers can receive a rent or seller's surplus. Such workers are likely to be older and more established employees whose next-best alternative may involve substantial moving and adjustment costs, and their interests are likely to be represented by unions since unions are a political institution representing the average or *median* union voter rather than the *marginal* worker. In fact, the union dictum to 'take labour out of the labour market' in part can be regarded as a statement to get all existing workers the competitive wage necessary to attract *new* workers – that is, to garner the rents for labour. If conditions change so that new workers could be hired at a lower wage, unions may try to protect the rents of incumbent workers by engaging in two-tier bargaining, whereby the incumbent workers are paid more than new workers for the same job.

Since plant closings involve more than simply a marginal adjustment of the plant, by definition a loss of rents can be involved and political pressure can be expected (in direct proportion to the magnitude of these rents) to preserve the rents for intramarginal workers. This lumpy adjustment process of a plant closing is in contrast to the marginal adjustment process whereby rents would not be involved and workers at the margin of decision, by definition, would be relatively indifferent between their current job and next-best alternative.

It is true that even mass layoffs and plant closings that are intramarginal to the firm may be marginal to the industry. Presumably the least efficient (highest cost relative to revenues) firms are the first to leave the industry and the appropriate adjustment is made at the margin of the industry.²³ Nevertheless, it is unlikely that every worker in the marginal firm going out of business is at the margin of indifference with respect to this and alternative activities, including employment with other firms in the industry. Thus the loss of individual-specific rents can be involved when the lack of a bailout results in mass layoffs or closures.

Wage fixing and group rents

In addition to these individual specific rents (arising because employers pay *each* individual worker the competitive or market wage rather than a wage equal to only their next-best alternative) rents can arise for *groups* of workers through wages being fixed or set above the competitive

norm, (e.g., by unions or legislation such as minimum wages). Again, wages can be higher than the workers' next-best alternative for marginal as well as intramarginal workers and the latter may also be collecting individual intramarginal rents. In fact, since employment is likely to be reduced relative to what it would be in the absence of such wage fixing, the marginal workers are unlikely to be employed and the rents can be even greater for the remaining intramarginal employees.

This type of rent or high wage also can be a contributing cost factor to the insolvency of the firm.²⁴ Such a rent is associated with market inefficiency in that, at the reduced level of employment, what consumers are willing to pay for the output generated by additional labour (i.e., the value of the marginal product of labour) is greater than what workers are willing to accept to produce that output (i.e., their reservation wage reflecting the value of their next-best-alternative activity). Efficiency would dictate increased employment in such sectors but only if that employment were associated with a *lower* labour cost (including any wages sustained by a bailout) that reflected what consumers and taxpayers were ultimately willing to pay for the additional output.

CONCLUSIONS

The foregoing indicates that substantial wage losses can be associated with individual workers moving to their next-best-alternative activity, over and above the income loss associated with periods of unemployment. These wage losses can emanate from losses through deferred compensation, specific human capital or the compensating wage premium associated with the risk of bankruptcy in the original job. These wages in excess of one's next-best alternative are not really rents but rather are compensating wages paid respectively for past contributions to productivity, reduced turnover, and risk of job loss. Individual rents, however, can accrue to workers who have a reservation wage (reflecting the value of their next-best alternative) that is less than the competitive wage they are paid and group rents can accrue from wage fixing through unions or legislation.

Likely prevalence in bailout situations

The extent to which such income loss associated with the loss of compensating wages or rents is likely to be important in bailout situations is difficult to judge on *a priori* grounds. On the one hand, the

loss to workers may be small because deferred wage systems are unlikely to be financed by employers, and individual and group rents are likely to be squeezed in situations that ultimately require a bailout.

On the other hand the loss to workers may be substantial if a) bargaining over the rents prevents their being squeezed or b) they in fact represent a cause of the bailout or c) firms find it expedient to renege on paying deferred wages. The *ex post* losses may also be substantial if they represent the reduction of a wage premium for risk of job loss or the loss of specific human capital – losses that have not come to fruition but for which workers already may have been compensated *ex ante*.

Whatever their sources, the loss of compensating wages or rents do result in an income loss to workers. However, their equity and efficiency implications are complicated by the fact that they can reflect compensating wages to achieve presumably efficient compensation systems, risk taking and human capital formation or they can reflect rents, the loss of which does not prevent those workers from being reallocated to their most valued activities. Even pure rents, however, may have been dissipated by costly activities designed to preserve the rents, in which case the removal of rents may also affect efficiency (Dales, 1983).

Market-failure analysis revisited

It is in part for these reasons that the market-failure analyses, discussed previously, have a particular appeal as a way of estimating the employment benefits of a bailout. They focus on the *specific* sources of market failure that could make compensating wages for deferred compensation, risk premium or the financing of specific human capital suboptimal. In essence, the income loss associated with these factors would be socially unacceptable if it were associated with a specific failure of the market to account for such factors as externalities or imperfections including 'second-best' consideration, distributional issues and macroeconomic stabilization.

With respect to the loss of rents, the market-failure analysis also recognizes the fact that a competitive economy will maximize the sum of producer and consumer surplus since these surpluses represent 'gains from trade' from expanding activity and such potential gains will be exhausted in a competitive economy. This basic economic fact must be recognized in the decision to encourage or discourage the market in its constant reallocation of resources.

In essence, in the absence of well-defined market failure, the allocation of resources associated with bankruptcy is presumed to be socially optimal even though this may involve substantial income losses to some. Many of these losses can be associated with market-determined institutional arrangements such as deferred wages, risk premiums for expected job loss and the financing of specific human capital. Again, these arrangements can be presumed optimal, in the absence of well-defined market failure. The losses may also be associated with the loss of rents, but again this can be presumed optimal in the absence of well-defined market failure.

The implication of this analysis is not to suggest that market intervention, a bailout for example, is never optimal. It is methodologically questionable to always presume that the *economic* marketplace *always* behaves optimally but the *political* marketplace *never* does. Rather, the implication is that in a market-oriented economy the *economic* justification for bailouts should rest on the identification of well-defined market failures. If primary reliance is to be placed on the market as the mechanism to achieve the efficient allocation of scarce resources, it is crucial to be wary of possible market failures. It is as important to understand how markets can fail as it is to understand how they can function. It is also important to avoid the impression that markets are failing because some people do not like some of the dysfunctional outcomes an efficient market can yield.

NOTES

- 1 The term *social* is used here to include distributional and other benefits and costs that may be valued by society as well as the *economic* benefits and costs (*private* costs and benefits and *externalities* to third parties). In economic calculations, income changes are weighted equally for all individuals whereas in social calculations different distributional weights can be used. In essence, private welfare plus externalities equals economic welfare and economic welfare plus distributional consequences equal social welfare (e.g., Glenday 1982, 4).
- 2 Because we do not arrive at the point where costs and benefits are actually compared it is not necessary to deal with the appropriate cost-benefit measure (e.g., benefit-cost ratio, internal rate of return, net benefits) to use in project appraisals.

- 3 Such consequences are emphasized and discussed extensively in Bluestone and Harrison (1982), Canada (1979), Gordus, Jarley, and Ferman (1981), Reid (1983), Saunders (1982, 1984), Stern, Wood, and Hammer (1979), and Thomas Owen and Associates (1982).
- 4 Obtaining such information *after* the bailout to do an *ex post* evaluation would be more difficult, because it depends upon the availability of *past* personnel or payroll records. Our attempts in this area to get detailed information on the personal and labour-market characteristics of *individual* workers involved in past bailouts proved unsuccessful.
- 5 This is clearly indicated, for example, in Jenkins (1980) where the pure economic waste generated by import quotas is estimated to be over \$14,000 per year of employment created, compared to a wage of less than \$10,000 per year in the protected industry. This leads Jenkins to suggest that an alternative to such quotas would be 'to allow the market to bring about industrial adjustments while government programs play an active role to retrain and assist displaced workers to find other employment' (1).
- 6 Such weights could be obtained, for example, from those that are implied by the progressive tax rates of our income tax structure or from past government projects where distributional considerations were important in the choice of one project over another (Gunderson 1983, 3). The use of such measures can be complicated by the fact that political support for particular projects even on redistributive grounds can reflect only a portion of the *overall* redistributive intent. Also, the political system has a memory and redistribution may occur in rounds rather than all at once.
- 7 The effect of such distortions is discussed in Evans (1983, 332-8).
- 8 Such detailed assessments have been made in the evaluation of income loss to workers displaced by tariff reductions (Glenday 1982) and they represent a marked advance over procedures that simply evaluate the expected period of unemployment at the pre-layoff wage rate.
- 9 These federal longitudinal data sets have been used to ascertain the earnings experience of specific workers who were displaced by tariff reductions in Canada (e.g., Glenday 1982).
- 10 If census data were used to measure income losses from recent bailouts, then earnings equations would have to be estimated from the 1971 Census (and adjusted upward) since the 1981 Census Public

Use Sample Tapes likely will not be available until at least the spring or summer of 1984.

- 11 Such current data is available for a large number of industries, occupations and communities from Labour Canada's annual *Survey of Wages and Working Conditions*. Ranges of wages as well as averages are given so that ranges of alternatives could be specified.
- 12 Other applications or elaboration of this framework are contained in Evans (1983), Glenday (1982), Glenday, Jenkins, and Evans (1982).
- 13 This finding of the income losses of displaced workers being high in periods of recession is emphasized in other studies (e.g., Stern, Wood, and Hammer 1979, 150). As Harberger (1981, 3) emphasizes, however, in calculating present values of income streams this *abnormally* high income loss applies only during a recession.
- 14 Many of these indirect effects on workers and on the community as a whole are discussed in Bluestone and Harrison (1982, especially 69-75).
- 15 In addition to the Canadian studies already mentioned a number of other studies are discussed and reviewed in Baldwin (1982), Glenday (1982, 15, 95-98) and Harris, Lewis, and Purvis (1982, 34-39).
- 16 A number of plant-closing studies are discussed in Bluestone and Harrison (1982) and Gordus, Jarley, and Ferman (1981). Most concentrate on the unemployment and noneconomic consequences to workers as well as the consequences to the community. Some (e.g., Stern 1972 and Stern, Root, and Hills 1974) do have information on income losses. Stern, Wood, and Hammer (1979, 123-126) also estimate an expected income loss of 36 per cent for workers who would have been displaced had a particular plant not been continued through community-employee ownership. To do this they use information from local labour-market reports, job advertisements in newspapers, employee interviews and the literature on plant closings. The Ontario Ministry of Labour is also conducting a survey of workers affected by plant closings and this should provide information on the magnitude and form of their income losses.
- 17 For example, Glenday (1982, 140-1) illustrates how the relative income loss (loss as a per cent of previous income) from delaying the layoff of workers for five years differs by the sex and age of workers as well as by the assumptions used with respect to wage adjustments and the data base. Evans (1983, ch. 13) also illustrates how the

- labour externality from delaying layoffs (for example, by bailing out a firm) can vary depending upon a number of factors.
- 18 Certainly there are alternative perspectives, that attack the market not so much because of *specific* market failures but rather because of the possible dehumanizing and alienating aspects associated with competition and the possible conflict between market and community interests (e.g., Bluestone and Harrison 1982 and works cited therein). Much of their emphasis is on a *publicly* planned economy stressing local community interests, rather than the planning associated with the 'invisible hand' of the marketplace. Our emphasis here on a market economy is simply one that takes the current system as given, recognizing that by emphasizing the importance of market failures in a market-oriented system we may be emphasizing the wrong system. This latter question is obviously beyond the scope of this study.
 - 19 Examples of pension losses emanating from bankruptcies are given in the *Ontario Select Committee on Plant Shutdowns and Employee Adjustment*, interim report.
 - 20 As Harris, Lewis, and Purvis (1982, 11) point out, it may be perfectly rational for declining industries to run down their existing capital stock as long as variable costs are covered, but not to engage in additional capital formation if the associated fixed costs cannot be covered.
 - 21 An example of where the existing community infrastructure was able to attract new industry is in the area around Boston where the declining textile industries were replaced by high-technology industries. As Bluestone and Harrison (1982, 97) point out, however, most of the displaced textile workers entered the service and trade sectors that supported the high-technology industry itself. In essence, the unimodal skill distribution associated with the old textile and other 'smokestack' industries were displaced by a bimodal skill distribution of high-skill, high-technology workers and the less skilled support sectors of service and trade. It is this widening of the skill distribution and its attendant social consequences that concerns many with the current deindustrialization that is occurring in many areas.
 - 22 To a certain extent this may be less prevalent in *declining* industries because entry is unattractive (Hillman 1982, 1182). This leads to the anomolous possibility of rents without market forces to dissipate

them. Such 'rents', however, could also be regarded as compensating wages for remaining in a declining industry.

- 23 Usher (1983, 11-21) emphasizes the importance of designing subsidies to ensure incremented production. Otherwise the amount of subsidy will be unnecessarily high because it will also be given to firms that would have carried on production even without it (in which case it is a rent to them and will not affect their output). Applying this to bailouts, since bailouts are firm-specific and *ad hoc* they facilitate the possibility that the subsidy will ensure incremented production to the extent that the subsidy is given only to the firm at the high-cost margin. (This likelihood is increased because applications for a bailout are likely to be a last resort since they reduce the confidence of customers and workers). Lower cost, intramarginal firms are unlikely to object because the subsidized firm is unlikely to pose a competitive threat – the subsidy simply offsetting their cost disadvantages. If they do object, it is likely because they feel they have similar cost conditions and the subsidized firm will now be able to displace some of their market, in which case the subsidy simply relocates production rather than encouraging incremental output. In reality, bailouts are likely to involve both some reallocation and incremental (actually sustained) production. The production of the more inefficient firm is likely to be sustained (when it would otherwise have dissipated), replacing some of the output of more efficient firms.
- 24 Gordus, Jarley, and Ferman (1981, 45), for example, indicate that virtually all of the plant closings they reviewed were unionized. In many instances such closings were associated with relocation to nonunion environments. Also, workers who lose unionized jobs often are re-employed in nonunion jobs (e.g., Bluestone and Harrison 1982, 97). This raises the question of the extent to which such constant reallocations in a market economy represent disputes over who will get the rents, in addition to, or as well as, movements representing allocative efficiency.

6

Assessing the costs of bailout assistance

INTRODUCTION

Estimating the costs of bailout assistance presents methodological problems equally as complicated as those associated with estimating employment benefits. While the benefit side of the equation tends to focus on the employment issues, the cost side tends to focus on costing the possible forms of assistance including cash grants, equity participation, subsidized loans, and loan guarantees or loan insurance.

Assistance to failing firms usually comprises a set of financial and real (i.e., investment) elements that are tailored to meet the needs of the particular bailout. Since the causes of financial distress that lead to a bailout are varied and the requirements for assistance are different, the elements in the assistance package will be unique to the specific bailout.

The major element in the financial-assistance package is an injection of new funds into the failing firm either directly from the government agency (or agencies) sponsoring the assistance or indirectly through actions that make it easier for the firm to obtain funding from the capital market. Typically, the assistance is directed toward a specific asset or operation of the firm and is contingent on the company meeting certain conditions. It is rare to find assistance provided only to reduce financing charges on the operation. One crucial implication for policy makers is that any financial assistance will confer windfall gains of wealth on one or all of the classes of investors in the firm being bailed out; typically, the loser in this wealth transfer is the government (or more appropriately, taxpayers).

Other elements in the package can include the following:

- financial instruments issued to the government (e.g., warrants, term-preferred shares) whose value is contingent on the future success of the company;
- commitments by the company to employment, location, new asset acquisition, and product research and development; and
- reductions in the value of the claims of outstanding investors.

These other elements in the package can be interpreted as attempts by the government to correct for unacceptable wealth gains to classes of investors within the firm receiving assistance.

For example, suppose a bailout package included only a direct cash grant to purchase machinery which is not used as collateral for a specific debt issue. Since earnings are now higher and the value of assets accruing to unsecured creditors in the event of default has increased, the risk to unsecured creditors has fallen. This will increase the market value of their holding and result in a wealth gain. The equity holders are also better off after the grant since the earnings available to them have increased. If these wealth transfers are not acceptable to the government, the financial-assistance package can include provisions which make the assistance conditional on the debt holders' reduction of the value of their claims and also include the issuance of warrants to the government. The former can be structured to offset the wealth gain to debt holders; the latter can offset any wealth gain to equity holders.

There are three kinds of costs associated with the major forms of financing found within the assistance packages.¹ First, there are direct or 'out-of-pocket' costs of assistance – money flowing from the government to the firm without a reverse flow of expected future cash payments. Examples include cash grants and the payment of a company's interest charges over and above a predetermined level.

The second cost, which is slightly harder to measure, is the opportunity cost of the government that is accepting risk without commensurate compensation. For example, a government can lend money to the firm in distress at an interest rate that is less than the prevailing risk-adjusted capital-market rate. The difference between these two interest rates reflects an opportunity cost to the government. Equivalently, a loan-insurance scheme at less than risk-adjusted insurance rates also generates opportunity costs.

The third source of cost is the misallocation of resources resulting from opportunistic behaviour by the owners (or managers) of bailed-out firms; such behaviour can be induced by the financial assistance. An example would be loan insurance under which management may increase the firm's and the equity holders' risk exposure by undertaking very risky projects and utilizing an unreasonably high ratio of debt to equity capital. This is a problem of moral hazard and although it is very hard to measure its consequences can be serious.²

TYPES OF ASSISTANCE

A number of possible types of assistance are available including cash grants, equity participation, subsidized loans and loan guarantees, and insurance. Each of these has cost implications, and methodological problems are often involved in evaluating such costs.

Cash grants

Under this form of assistance the government provides a cash grant which is to be used for a specific purpose. Cost-monitoring is limited to confirming that the funds were used for the intended purpose. The actual cost is the dollars expended; there are no opportunity costs since the government does not take a risk position. Finally, there are no induced problems with opportunistic behaviour after the grant is in place. Assuming that the existing creditors take the necessary steps to prevent the management from diverting assets, the incentive for opportunistic behaviour actually may be reduced; the infusion of cash will tend to reduce the debt-equity ratio, the probability of bankruptcy, and thereby the incentive to increase the risk of the firm.

The impact of the cash grant is demonstrated in Table 12, which presents the cash flows from the existing assets conditional on the state of the economy. For ease of exposition, a zero discount rate has been assumed.

Let us say that the government decides to give the company a cash grant of \$500 to purchase a new machine, and that the incremental cash flow of the new machine is \$600 in a good economy and \$400 in a bad one. The incremental impact of these cash flows is presented in Table 13. Remember that the amount of debt outstanding has not changed. In this example, the market value of debt has increased by \$200 since the increased cash flow due to the cash grant has increased the expected pay-

TABLE 12

Cash flows: existing assets

State of economy	Probability	Cash flow to firm	Existing debt		Equity
			Promised	Expected	
Good	0.5	\$2,000	\$1,900	\$1,900	\$100
Bad	0.5	1,000	1,900	1,000	0
Market values		1,500		1,450	50

TABLE 13

Cash flows: including impact of cash grant

State of economy	Probability	Cash flow to firm	Existing debt		Equity
			Promised	Expected	
Good	0.5	\$2,600	\$1,900	\$1,900	\$700
Bad	0.5	1,400	1,900	1,400	0
Market values		1,500		1,650	350

ment to the debt holders. In addition, the market value of equity has increased by \$300 to reflect the higher payoff expected in a good economy. Notice that the cash grant of \$500 has been shared by both bondholders and equity holders.³

An additional feature of the cash grant is that it is perceived as a once-only event intended for a specific purpose. Thus, expectations of continuing assistance in the future need not be generated.

New equity participation

Under this form of assistance, the government purchases a number of shares of equity at the prevailing market price, thereby taking a risk position and expecting compensation through dividend payments and/or price appreciation.

In order to evaluate the costs of the government purchase of equity consider the example in Table 12 but assume that the firm issues \$500 worth of equity securities to the government and uses the money to

purchase a machine with the cash-flow consequences portrayed in Table 13. In fact, the final values are identical – the market value of the firm is \$2,000, of the debt \$1,650, and of the equity \$350. In this example, due to the risk-sharing result of issuing equity, the \$500 investment is worth \$300 (i.e., the final equity value of \$350 is equal to the pre-issue value of \$50 plus the market value of the new issue). The cost of this assistance is not \$500 but \$200; this equals the gain in value to bondholders due to the reduction in risk. The remaining \$300 of the \$500 is not a cost to the government since it is compensated for by the expected cash flow to equity.

If the government accepts this result, the wealth transfer of \$200 goes from the government to the bondholders. This position can be reversed if the assistance package is contingent on a provision that bondholders reduce their claims by a value of \$200. This requirement would increase the equity value by the full \$500 at no cost to the government. The out-of-pocket cost to the government of \$500 is compensated by an expected stream of future cash flows from the firm with a present value equal to \$500.

There are, however, the potential problems of opportunistic behaviour by the owners/managers of the firm at the expense of the government as an equity holder. To the extent that assets can be diverted for the benefit of the owner/managers at the cost of the government, there are resource losses. To prevent this behaviour, the government equity holder may have to monitor management decisions and/or become actively involved in the management of the firm; these are additional costs associated with the assistance.

In addition, since the government is involved as an equity holder, market participants, rightly or wrongly, might anticipate that the government will not let the firm go bankrupt but instead will provide further assistance when required. This will result in an increase in the market value of the debt possibly at the expense of the shareholders, including the government. In addition, management may invest in excessively risky projects since it expects that the government will not let the firm go bankrupt; the worst outcome would be a compensated nationalization of the firm.

Subsidized loans

In some situations governmental assistance is provided to companies in financial distress through direct loans issued on 'subsidized' terms.

Private-market lenders sometimes invoke capital rationing and refuse to lend funds to the financially troubled firm regardless of the promised rate that the borrowers are willing to pay. In these cases, the provision of debt by the government agency is equivalent to a subsidy. However, the actual magnitude of the subsidy is difficult to measure in this example since the interest rate that would have been charged in the private capital market is not known. In other situations direct government loans to companies are made at interest rates less than the current market rate that would be charged on the financially distressed company's debt, given the risk associated with payment to creditors. The size of the subsidy is reflected in the difference between the interest rate charged by the government and what would have been charged in the capital market; this is an opportunity loss or income forgone.

Before presenting an example of the measurement of the subsidy it is useful to analyse briefly the valuation of a risky loan. Some of the concepts (e.g., expected return, promised rate) have already been presented (see Chapter 4).

Consider the very simple case of a firm which has \$100 in equity and needs to raise \$900 in debt to finance a \$1,000 project. Depending on the state of the economy, the project would generate cash flows at the end of the year of \$1,383.33 with a probability of 60 per cent and \$925 with a probability of 40 per cent. The bond involves a promise to pay \$1,095.33 and has a current market value of \$900. The valuation of the bond can be confirmed by finding the present value of the expected bond payments at the expected interest rate of 14.13 per cent.

The cash-flow consequences of the project and the impact on investors are presented in Table 14. Given the risk of the project, the cash flows from the assets are evaluated at a discount rate of 20 per cent; this results in a value of the firm of \$1,000. With the market value of debt of \$900, the value of the equity is \$100. The project is marginal since the market value of the equity after the project remains at \$100 which was its value before the investment. In this example, debt is risky since if the economy does poorly the debtors do not receive their promised payment. The value of risky debt can be evaluated as the value of debt as if it were riskless with an adjustment to reflect risk. The cash-flow consequences and valuations are presented in Table 15.

If the bond is riskless the debtors are certain of obtaining the promised payments. With a riskless rate of interest of 10 per cent, the value of riskless debt in this example would be \$995.75. To make the debt risk-

TABLE 14

Cash flows: including impact of cash grant

State of economy	Probability	Cash flow to firm	Existing debt		Equity
			Promised	Expected	
Good	0.6	\$1,383.33	\$1,095.33	\$1,095.33	\$288
Bad	0.4	925.00	1,095.33	925.00	0
Market values		1,000.00		900.00	100

TABLE 15

Valuation of risky debt

State of economy	Probability	Promised payments	Risk adjustment	Expected payments
Good	0.6	\$1,095.33	\$ 0.00	\$1,095.33
Bad	0.4	1,095.33	-170.33	925.00
Market values		995.75	(95.75)	900.00

less, the shareholders would be required to make a payment to the bondholders when the actual cash flow from the assets is less than the promised payments. However, shareholders are not required to do this because of limited liability and hence the debt is risky. Therefore risky debt can be viewed as a combination of riskless debt and the provision of an insurance policy to equity holders. The insurance policy pays off to the equity holder when the earnings of the firm are less than the promised payments. In Table 15 the cash-flow consequences of the insurance policy are portrayed under the heading 'risk adjustment'. The value of this insurance policy⁴ (or equivalently, limited liability) is equal to \$95.75. This policy is of benefit to equity holders and a cost to debtors. Thus the market value of risky debt is less than its value if it were riskless by the amount of the limited liability.⁵

TABLE 16
Government subsidized loan

State of economy	Probability	Cash flow to firm	Bond		Equity
			Promised	Expected	
Good	0.6	\$1,383.33	\$990.00	\$1,095.33	\$393.33
Bad	0.4	925.00	990.00	925.00	0.00
Market values		1,000.00		863.46	136.54
				(to private investor)	

Loans at below market-determined interest rates

Now suppose that instead of having a loan of \$900 provided by the private capital market, a government agency provides the loan for \$900 at the risk-free rate of 10 per cent. The cash flows from the assets remain as in the example presented in Table 15. The cash flow impacts are presented in Table 16. What is the value of the debt in this example? Although the government has provided \$900 in debt capital, the value of the debt in the marketplace would be lower. With an expected return on debt of 11.64 per cent,⁶ the market value of the debt to a private investor would be the present value of the expected bond payments; this equals \$863.46. The subsidy is the difference between the money provided (\$900) and the market value of the debt (\$863.46), or \$36.54 in this example.

Which participants ultimately receive this subsidy? In our example, there are no outstanding bondholders and any gains due to the subsidy accrue to the equity holder. For example, the market value of equity is \$136.54 which is greater than its value under a market-derived bond interest rate by an amount equal to the subsidy.

If there is debt outstanding and the new investment of \$1,000 reduces the risk of this debt (perhaps by increasing coverage ratios or assets available for liquidation in the event of a bankruptcy) then some of the gains from the subsidy will accrue to the bondholders.

Under this subsidy scheme, it appears that there is a wealth transfer equal to the subsidy from the government to the investors in the firm. The loss in wealth to the government reflects the uncompensated risk of lending money at below market rates. If the government is more

efficient at risk diversification than the capital market, the appropriate discount rate for the government to charge is the riskless rate and there will be no wealth loss to the government. However, there will be a gain to investors in the company receiving the government assistance because interest payments will be lower than they would have been with a private-capital-market loan.

The provider of the subsidized loan needs to determine which group of investors, if any, should obtain the benefits of the subsidy. If the risk of outstanding debt is unaffected by the subsidized loan, the government agency may not want to have the full benefits accrue to equity holders. A number of techniques are possible to moderate or even eliminate this gain. The agency could have a provision in the debt contract which accelerates the repayment of the loan should the firm become successful. This reduces the length of time that the subsidy is outstanding and hence its value. Alternatively, the company, in exchange for financial assistance, can issue to the government financial instruments whose value is contingent on the firm's success. For example, the government could require issuance of warrants or income debentures of a market value equal to the subsidy. This would eliminate the gain to the equity holders and compensate the government, *ex ante*, for their risk exposure. These financial instruments are useful in bailouts; they have no cash-flow implications over the operating period, when the firm is attempting to return to a profitable position. In addition, monitoring costs to the government are lower; any attempt to shift wealth to equity holders will benefit the governments well.

Subsidizing market-determined interest rates

In the previous discussion, the government agency provided the funds for the loan and charged interest rates below capital-market rates. This form of assistance requires that the loan-monitoring and transactions costs be borne by the government agency; these may or may not be passed on to the debtor. In addition, the agency must specify the terms and conditions of the bond contract; in most instances these are well-established and the transactions costs are minimal.

There is another method of providing assistance. The company may choose to negotiate a loan with a private-capital-market participant and ask the government to subsidize the interest payments above a particular interest rate. For example, if the promised rate of interest is

20 per cent, the government agency can agree to make interest payments in excess of 10 per cent. This results in lower interest rates for the firm which make it easier to keep operating. The subsidy is then equal to the cash payment for interest above a stated level.

Returning to the example in Table 14, the company has issued debt without any subsidy at a promised rate of 21.7 per cent. The cash-flow consequences are noted below in Table 17. Under the interest-payment subsidy scheme the bondholders expect to obtain the same payments; therefore the market value of their loan is unchanged. However, under one outcome the government agency pays \$105.33 which is equal to the interest payment above a 10 per cent interest rate on the debt value of \$900. This payment accrues to the benefit of the equity holders. Even if the government payment is made directly to the bondholders, it is equivalent to a payment to the equity holders since a reduction in interest payments flows through to equity holders as an increase in income. The net effect is identical to that observed in the example of a loan at the risk-free rate which is below current market rates.

In more complex examples, the specific form of the interest-subsidy scheme may reduce the risk of the debt by increasing the payoffs to bondholders in those states in which the economy does poorly. If the interest-subsidy scheme was introduced subsequent to the negotiation of the interest rate on the debt, the resulting risk reduction on debt would increase the market value of the debt and the benefits of the subsidy would be shared by both creditors and equity holders. If the particulars of the scheme were available during the loan negotiations they would be reflected in the yield on debt and equity holders would obtain the full benefit of the subsidy.

Loan guarantees/loan insurance

All of the forms of government assistance considered to this point have required an actual outlay of funds either to provide a cash grant, purchase debt or equity, or to pay interest payments above a predetermined level. In contrast, the forms of assistance in this section do not require an actual cash outlay for bailout benefits to accrue to the company in financial distress. This may explain the popularity of these forms of financial assistance. However, as demonstrated below, there are costs to the government of using loan guarantees and loan insurance and these costs must be considered in evaluating bailout assistance.

TABLE 17

Interest rate subsidy scheme

State of economy	Probability	Cash flow from assets	Bond		Gov't pays	Equity
			Promised	Expected		
Good	0.6	\$1,383.33	\$1,095.33	\$1,095.33	\$105.33	\$393.33
Bad	0.4	925.00	1,095.33	925.00	0.00	0.00
Market values		1,000.00		900.00	(36.54)	136.54

Loan guarantees are typically found on longer term debt instruments where in the event of default the government agency providing the loan guarantee pays to the creditor the promised principal payment (and interest payment as required). The government agency liquidates the asset(s) pledged as security and uses the proceeds to offset the amount paid to the creditors. An alternative form of loan guarantee provides for financial institutions to liquidate the security for a loan in the event of default, with the loan guarantee making up the difference between the payments promised to the institution in the event of default and the liquidation proceeds.

Loan guarantees are certainly not new forms of assistance; they were used extensively in railway financing during the early wave of construction and are currently used by some provincial governments for the financing of provincial hydro-electric companies. The effect of the guarantee is to make the debt cost of the guaranteed loan equal to the debt cost to the guaranteeing government. Thus a loan guarantee by the government of Canada would result in a riskless rate of interest being charged on the debt. A provincial-government loan guarantee would, in most instances, result in an interest rate above the risk-free rate.

Loan insurance is exactly as the term signifies – an insurance policy for bondholders which provides for the payment of any deficiency in the promised payment from the realizable value of the loan's security. The government agency providing the loan insurance generally levies an insurance fee or premium on the company; the levy is usually a stated per cent of the value of the insured loan. The insurance premium does not depend on either the variability of the firm's cash flows used to make principal or interest payments on the expected liquidation value of the assets in the event of default. In addition, usually 90 per cent of the total

loan is insured. As in the loan-guarantee example, the interest rate required on an insured loan would approach the risk-free rate of interest; it might deviate slightly if only 90 per cent of the loan is insured and hence some risk to the holder of the insured debt remains.

A major user of loan-insurance assistance is the Enterprise Development Program (EDP); the program only insures loans for financial institutions who are also creditors on uninsured short-term loans with the same firm. This provides an incentive for the financial institution to monitor the behaviour and financial performance of the firms receiving assistance thereby minimizing the monitoring costs of the government agency.

Basic issues in costing loan guarantees

Because the cost to the government of loan guarantees is equivalent to the value gained by the investors in the firm receiving assistance, the terms 'cost' and 'value' of the guarantee will be used interchangeably.

Although the two extremes of the value of a loan guarantee are zero and the total amount of the loan, neither of these extremes are reasonable estimates of its value. If the value of the guarantee were zero it would not be of any benefit and there would be no demand for it; a scenario clearly inconsistent with observed behaviour. If the value of the guarantee equals the amount of the loan, the loan could default immediately upon the issuance of the loan guarantee; this is also not a reasonable assumption. The value of the guarantee will likely fall between these two extremes.

In addition, the distinction between the *ex ante* and *ex post* cost of the guarantee must be made clear. At the time the guarantee is undertaken, there is an *ex ante* cost equal to the guarantee fee that should have been collected by the government to compensate for the risk entailed. Once the guarantee is in force, the actual cost of the guarantee (its *ex post* value) will range from zero (in the event the loan is paid off in full) to the full value of the loan. These possible outcomes must be included in the valuation of the *ex ante* cost.

Conceptually, the value of a loan guarantee can be obtained by the following relationship:

$$\text{Value of loan guarantee} = \text{Market value of debt with loan guarantee} - \text{Market value of debt without loan guarantee}$$

But the market value of debt with a loan guarantee is equivalent to the value on a risk-free loan⁷ and the market value of debt without the loan guarantee is equal to the value of risky debt. Thus the value of the loan guarantee is equal to the difference between a debt contract evaluated as if it were risk-free and the same contract evaluated as if it were risky.

In the discussion of risky debt we noted the following relationship:

$$\begin{array}{lcl} \textit{Market value} & & \textit{Market value of} \\ \textit{of risky debt} & = & \textit{risk-free debt} \\ & & - \textit{Insurance policy due} \\ & & \textit{to limited liability} \end{array}$$

Equating these two expressions, the value of the loan guarantee is equal to the implicit insurance policy due to limited liability; this is the basis for calculating the value of the loan guarantee.

To demonstrate the measurement of the value of a loan guarantee we will continue to use the two-state example with a risk-free interest rate of 5 per cent, and an expected rate of interest of 8.37 per cent. The company has issued debt without a guarantee for \$900 and used \$100 in equity to purchase \$1,000 worth of assets. The cash-flow consequences of the asset acquisition and the debt payments are presented below in Table 18.

In this case, debt is risky and equity has a market value of \$100. Assuming that the government enters the picture by agreeing to guarantee the outstanding debt, bondholders can feel assured of the payments promised them. The present value of these payments, assuming they are riskless, is \$1,000 (i.e., the present value, evaluated at the risk-free rate of 5 per cent, of the promised payments of \$1,050). The value of the loan guarantee is equal to the value of the debt as if it were riskless minus its value as if it were risky; this equals \$100 (i.e., \$1,000 – \$900). This value is also equal to the value of insurance provided by limited liability. In the example of a loan guarantee, the government provides the insurance by making a payment to the creditor in that state of the world in which the cash flow is less than the promised payment⁸ (see Table 19 below). If the cash flow is above the trigger value of \$1,050 (the promised payment) the government need not pay anything to the creditor and the equity holder receives \$350. If the cash flow is less than the trigger value the guarantee is invoked and the government pays the bondholders \$150.

TABLE 18

Cash-flow consequences: existing assets and financing loan-guarantee problem

State of economy	Probability	Cash flow to firm	Existing debt		Equity
			Promised	Expected	
Good	0.5	\$1,400.00	\$4,050.00	\$1,050.00	\$350.00
Bad	0.5	900.00	1,050.00	900.00	0.00
Market values		1,000.00 ^a		900.00	100.00

^a Discount rate for asset cash flow is 15 per cent.

TABLE 19

Cash-flow results of loan guarantee

State of economy	Probability	Cash flow from assets	Bond		Gov't pays	Equity
			Promised	Expected		
Good	0.5	\$1,400.00	\$1,050.00	\$1,095.33	\$0.00	\$350.00
Bad	0.5	900.00	1,050.00	900.00	150.00	0.00
Market values		1,000.00	1,000.00	900.00	100.00	100.00
			(riskless debt)	(risky debt)	(guarantee)	

In this example, the full benefit of the guarantee accrues to the bondholders since their promised payments, which were originally set for risky debt, are rendered riskless.⁹ If the government agency finds this wealth transfer unacceptable, it can require a scaling down of the promised payments as a condition of the loan guarantee. At the extreme, this scaling down can be set such that the present value of the promised payments at the riskless rate is equal to the original market value of \$900. This will result in a reduced value of the loan guarantee and a wealth gain to equity holders.

Table 20 presents the cash-flow impacts of this requirement. The promised payments have been reduced to \$945 so that, at a riskless rate of 5 per cent, the market value of debt is \$900. The bondholders' value has not changed compared to what it was under the risky-debt scenario without a guarantee. In order to guarantee this payment to bondholders, the government must pay \$5 in the 'bad' state. The value of the guar-

TABLE 20

Cash-flow results of loan guarantee

State of economy	Probability	Cash flow from assets	Bond		Gov't pays	Equity
			Promised	Expected		
Good	0.5	\$1,400.00	\$945.00	\$945.00	\$0.00	\$455.00
Bad	0.5	900.00	945.00	945.00	45.00	0.00
Market values		1,000.00	900.00	827.00	30.00	130.00
			(riskless debt)	(risky debt)	(guarantee)	

antee has fallen to \$30 from its value of \$100 in the previous example. The reduction in the promised rate results in higher cash flows accruing to equity holders in the 'good' outcome. The beneficiary of the loan guarantee in this case is the equity holder, whose claim has increased in value by \$30 – the full value of the loan guarantee.

This example provides the other extreme in which the equity holders obtain the full benefit of the loan guarantee and the bondholders none. If gains to equity holders are not acceptable to the loan guarantor, then a condition of giving the guarantee would be the issuance of financial instruments, e.g., warrants, income debentures, or preferred shares which have a present value equal to the cost of the loan guarantee.¹⁰

Although these two-state examples are highly simplified, a number of important general conclusions are possible. First, the loan guarantee is a form of insurance policy and like any insurance contract has the potential for resource misallocation due to moral hazard and opportunistic behaviour; in this case on the part of either the company whose debt is guaranteed or the financial institution that holds the guaranteed debt.

Considering debtor behaviour first, under an insurance scheme it is in the equity holders' best interest to increase the risk of the firm after the insurance is in place, thereby increasing the probability that the insurance will be invoked. By increasing the risk of assets, the equity holders can increase their payoff in the 'good' state. However, due to limited liability they cannot reduce their payoff in the 'bad' state. Therefore, the value of their claim will increase. To minimize this type of behaviour, the guarantor must monitor closely the decisions undertaken by the firm's management. This can be expensive and unless a charge is

included in the guarantee fee, it is unlikely the costs will be passed on to the firm's equity holders.

Another method of minimizing the impact of opportunistic behaviour is for the government to ask for compensation for the loan guarantee in the form of securities whose payoff is conditional on the profitability of the firm (e.g., common equity or warrants). There are a number of instances noted in the analysis of the case studies in which the government(s) took securities. If the management attempts through opportunistic behaviour to increase the value of the equity, the government agency will capture part of the gain. This will reduce the incentive to management to engage in risk-increasing activities.

Opportunistic behaviour on the part of the financial institution holding the guaranteed loan is also possible. Since the payments to the institution are guaranteed, there is no incentive for the institution to monitor the activities of the firm and incur the related costs. The government agency can ensure that some monitoring by financial institutions is undertaken if it also requires that guarantees be provided only on loans held by financial institutions which also maintain non-guaranteed loans with the firm receiving assistance. The financial institution will monitor to ensure that it does not lose on its non-guaranteed loans.

In addition, the loan guarantee may work as an incentive for the financial institution to invoke the guarantee at the first moment that the firm is technically in default on the guaranteed loan. (There is no benefit in delay.) This, however, works counter to the basic idea behind the use of the loan guarantee – the continuation of a financially troubled firm. Some of the government agencies are aware of this problem with loan guarantees and have taken steps to ameliorate it. Sometimes financial institutions are forced to wait a specified period of time before sending in a receiver to trigger the loan guarantee in the event of a default. This delay provides the guarantor with time to attempt to resolve the problem before being forced to meet their responsibilities under the loan guarantee.¹¹

Extensions on cost of loan guarantees

The simplified approach described in the previous section is a one-period, two-state process in which the size of the government's potential involvement through the guarantee was related to the size (and spread)

of the cash flows from the assets, the size of the promised interest payment, and the market value of the assets. Thus the loan insurance is a claim contingent on the cash-flow outcomes of an underlying asset – the firm.

However, an analysis of the value of an actual loan guarantee is a much more complicated process than described in the previous section. The complications that must be considered include the following:

- Instead of two possible cash-flow outcomes from the firm's assets there are a very large number; the possible outcomes are described by a probability distribution which has an expected value (mean) and a variance (measure of variability or risk). This variability attempts to capture the business risk aspects of a firm's operations.¹²
- In evaluating the guarantee on a particular loan, the debt-service charges on the existing debt that ranks above or equal to the guaranteed debt must be considered. If we are evaluating a guarantee on preferred shares, the cash flows available to service the preferred shares must be the net of interest payments on existing debt.
- The simple examples encompassed one year, and the insurance policy depended on the cash flow at the end of the year relative to the size of the promised payment. However, the normal financial instrument that is guaranteed is longer-term and involves a sequence of promised payments; therefore the guarantee can be invoked at stated intervals throughout the life of the loan. This sequential insurance potential must be included in the analysis.

Fortunately, financial theory does have a model which permits the valuation of contingent claims even under the complications noted above. A computer is required for the operation of the model, but all of the inputs necessary to solve for the value of the guarantee can be derived from publicly available information. This model, described by Lessard et al. (1981) has been developed for the Corporate Finance Division of the Department of Finance and also has been used by them.

The basis of the model is to recognize that when the government provides a loan guarantee, the implicit insurance contract is equal to a put option provided to the financial institution, typically at a zero cost. From the point of view of the financial institution the put option works as follows: if the interest payments from the firm are less than the

promised value (called the exercise or striking price), the option is exercised and the loan is 'put' to the government who must make up the deficiency; if the interest payments are greater than the striking price the option is not exercised. From the point of view of the loan guarantor who writes the put option, the cash-flow consequences on a one-period guarantee are shown in Figure 3.

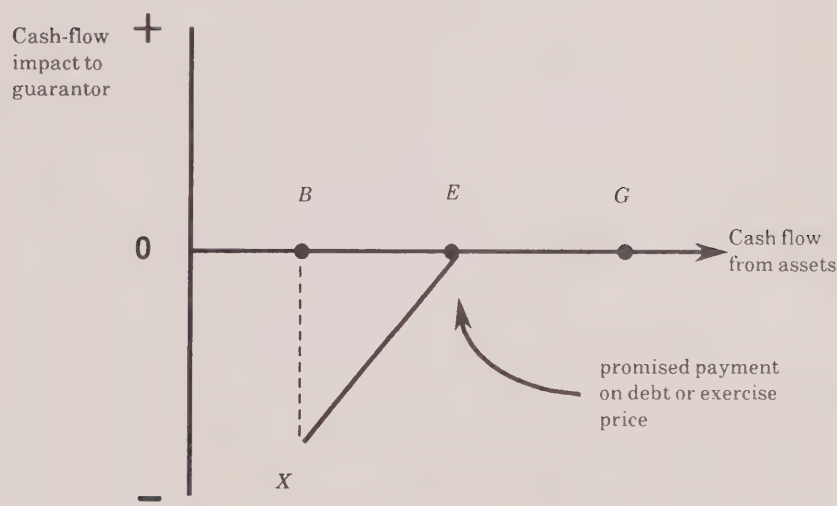
To the right of the trigger price E , there is no exercise of the option since cash flows exceed the payment required on debt; to the left of the exercise price, the guarantor must make up the deficiency. For example, if asset cash flows are at point B , the deficiency is BE and by construction this equals BX ; point X is on the option-value line. Under the two-state process, for example, if the cash-flow outcomes were B and G , the insurance would provide zero for state G and $BE = BX$ for state B .

In this contingent-claims model, the value of the insurance contract to the financial institution (or the cost to the guarantor) depends upon the following five variables: variance of the cash flow of the underlying asset; exercise price (level of promised payments); time remaining until a debt payment must be made; market value of the underlying assets; and the risk-free rate of interest. The greater the variance of the cash flow of the underlying asset, the higher the probability that the firm will be unable to meet a debt-service payment and thus the greater the value of the insurance policy. The larger the promised payments, holding all other variables constant, the greater the probability of a default and thus the greater the value of the guarantee. The longer the time required until a debt-service payment, the greater the chance of a poor cash flow and hence the higher the value of the insurance contract. The larger the value of the assets, the less likely is a default and thus the lower the value of the insurance contract. Finally, an increase in interest rates will reduce the value of the insurance contract.¹³

To demonstrate the impact of these variables on the value of a loan guarantee and the cost of the guarantees (i.e., the insurance premiums), the model described here has been applied to a number of firms in three different sectors. These valuations were undertaken by the Department of Finance¹⁴ as hypothetical guarantees on new debt for 1982. The sectors differed in their business risk, debt-equity ratios, and initial market values.

The results are presented in Table 21. As can be observed from column (6), the dollar value of the guarantee, per dollar of debt

FIGURE 3
 Cash-flow impact to loan guarantor



guaranteed, varies widely from 1 cent per dollar guaranteed in the diversified sector to 85 cents per dollar in the farm-equipment sector.

Each of the elements noted in columns (2) through (5) in Table 21 contribute to the risk of bankruptcy and hence the value of the guarantee. Considering the diversified sector, it appears that the very low value of business risk (measured as variance in returns) dominates and provides a low value to a guarantee. The resource and farm-equipment sectors have approximately equal levels of business risk but differ dramatically in financial risk as reflected in the importance of current liabilities and principal amounts outstanding (columns 3 and 5). The much higher value of the guarantee for farm equipment reflects the significance of financial obligations as a proportion of firm value (column 5).

Finally, the approximately equal values for guarantees on the debt of the resources and consumer-products sectors reflect the offsetting influences of the differences in business risk and current liabilities as a proportion of firm value.

TABLE 21

Value of guarantees: contributing factors

Firm (1)	Business risk		Financial risk				Value of guarantee (\$/% debt guaranteed)
	Variance in returns (% year) (2)	Current liabilities ÷ firm value (3)	Payouts ÷ firm value (4)	Principle amount ÷ obligations (5)	Firm value ÷ value (6)		
Diversified sector	0.5	0.55	0.12	0.23		0.01	
Resource sector	16.0	0.25	0.06	0.11		0.17	
Consumer products	6.0	0.53	0.09	0.12		0.20	
Farm equipment	15.0	0.89	0.11	0.71		0.85	

SOURCE: Notes to presentation by Henderson, I., and V. Jog of the Department of Finance (Corporate Finance Division) at Financial Research Foundation of Canada conference, Niagara-on-the-Lake, October 1983.

It appears that the values generated for loan guarantees coincide with our intuition on the probability of bankruptcy given certain financial and operating data.

Application of extended approach to costing loan guarantees

An example of the valuation of the loan guarantee in a bailout is presented in this section; the name of the company has not been provided by the Department of Finance. The company under consideration has publicly traded securities and requested a loan guarantee of US \$160 million on a junior floating rate, ten-year bond with no sinking fund provisions. The loan is secured by a new plant in Canada. Of the \$160 million loan, \$80 million will be guaranteed in year one and the rest in year two. The valuation date of the guarantee was 15 October 1982.

In implementing the loan-guarantee valuation model a number of assumptions had to be made concerning the refinancing of existing, nonguaranteed debt, the market value of the long-term capital at the valuation date, dividend payments on common and preferred equity over the ten-year period, the value of the plant at various points of time during the ten-year period, expected risk-free interest rates, and the lower limit on the value of the firm which will trigger a default (abandonment level).

The exposure of the guarantee measured in US dollars over the ten-year period is presented in Table 22. Notice that the exposure is the difference between the face value of the guaranteed debt and the market value of the plant collateral. The former reflects the contractual obligation faced by the government under the guarantee; the latter reflects the contribution to meeting the bondholder's claim by liquidating the plant. Therefore, even though the loan is for \$160 million, the true exposure is less. The result of applying the model as of 15 October 1982 is a value for the guarantee, referred to by the Department of Finance as the cash-grant equivalent, of \$30 to \$40 million on an average exposure of about \$70 million and a maximum face value of \$160 million.

The model results were also subjected to a sensitivity analysis based on changes in some of the input parameters. In Table 23 some of the results are presented for a particular value of long-term capital. Based on the simulation results in Table 23, the value of the loan guarantee is reasonably robust to changes in the input parameters, considered one at

TABLE 22
Guarantee exposure in US\$ (millions)

	(1) Face value of guaranteed debt	(2) Market value of plant collateral	(3) Exposure of guarantee (3) = (1) - (2)
1982	\$ 0	\$ 0	\$ 0
1983	80	40	40
1984	160	80	80
1985	160	80	80
1986	160	85	75
1987	160	90	70
1988	160	95	65
1989	160	101	59
1990	160	96	64
1991	160	94	66

TABLE 23
Sensitivity analyses on value of loan guarantee: long term capital = US\$2,500 (millions)

Input parameter	Guarantee value (\$)
Interest rates	
+1%	34.80
-1%	39.40
Business risk (variance)	
+.03	38.30
-.03	35.30
Abandonment levels	
+10%	37.80
-10%	35.70
Guarantee exposure	
+10%	40.00
-10%	33.40

SOURCE: See Table 21.

a time. Unfortunately, if the changes in input parameters are correlated, the sensitivity analysis presented in Table 23 may not represent the true robustness of the methodology to changes in input parameters.

NOTES

- 1 We are not including those costs associated with monitoring the firm that is receiving assistance. Such monitoring may be necessary to ensure that the firm is meeting any obligations associated with its receiving the assistance.
- 2 The problems are considered directly in the chapter dealing with policy prescriptions. A good discussion of the problems is found in Lessard, Baldwin, and Mason (1981). Here, we do not include the resource misallocation from behaviour by owners of other firms who, upon observing the prevalence of bailouts, believe that they can receive government assistance if insolvency arises from either their high-risk decisions or poor operating stewardship.
- 3 As long as the cash grant results in an increased cash flow which increases the expected payment to bondholders in one state of the economy, the market value of the debt will increase.
- 4 The insurance policy can also be analysed in terms of a put option.
- 5 If the underlying-asset cash flows become more risky but the expected value remains the same, the insurance policy becomes more valuable to the equity holder and the market value of debt falls.
- 6 The expected return on debt has fallen from the value in the example in Table 14 because the risk to a bondholder under the assumed set of cash flows would have fallen.
- 7 A market-value balance sheet for this firm would look as follows:

Assets		Liabilities	
Assets	\$1,000	Debt	\$900
Government assistance	S	Equity	$100 + S$
	$\$1,000 + S$		$\$1,000 + S$

where S is the market value of the subsidy payments; in this example, the market value is \$36.54.

- 8 This assumes that in the event of a default the guarantor will pay an amount equal to the present value of the future payments on the loan; the present value is calculated using the risk-free rate. To the extent that the bank pays the face value only, the loan with the guarantee is not strictly risk-free.
- 9 The market-value balance sheet with the loan guarantee in place would be as follows:

Assets		Liabilities	
Assets	\$1,000	Debt	\$1,000
Guarantee	100	Equity	100
	<u>\$1,100</u>		<u>\$1,100</u>

- 10 The analysis of loan insurance is very similar except that any gains must be reduced by the cost of loan insurance. For example, if the loan-insurance premium were equal to \$30, the gain to equity holders would disappear. If the loan-insurance premium is pre-determined, those companies with cash-flow risk above that implicit in the insurance premium will have increases in equity value.
- 11 This approach was used by the ODC in its loan guarantees for White Farm.
- 12 'Business risk' refers to the variability of the operating income which is derived from the variability of sales modified by the importance of fixed costs in the firm's operations.
- 13 The value of the guarantee is equivalent to an insurance premium that should be paid at the time the guarantee is put in place. If the financial instrument to be guaranteed extends beyond a year, the insurance premium is the present value of the sequence of annual payments that would be made. Thus, if the guarantee extended over five years and the value of the guarantee were \$1,000, an equivalent annual charge could be construed.
- 14 Presented in notes for an address by I. Henderson and V. Jog of the Department of Finance, Corporate Finance Division, at the Financial Research Foundation of Canada conference, Niagara-on-the-Lake, October 1983.

7 Business bailouts in political perspective

INTRODUCTION

In the past decade all of the advanced industrialized nations have been affected by changes in the international economy. Unlike the 1960s which were characterized by economic growth and optimism, the 1970s and 1980s have brought high unemployment and inflation, low growth and fears of de-industrialization (Cox 1982; Dahrendorf 1982; Shepherd et al. 1983; Magaziner and Reich 1983). As adjustment to economic change has become a central concern of the industrialized nations, each has sought to adopt policies of 'positive adjustment' that facilitate the movement of resources into growth sectors and out of declining sectors (OECD 1979a; Chandler and Trebilcock 1985). At the same time none of these nations has been able to ignore the political demands for assistance of those who stand to bear the transition costs of adjustment (Dyson and Wilks 1983a; Zysman and Tyson 1983, ch. 1). Potential losers have often organized and looked to government to shield them from market forces or to externalize the costs of adjustment. Much of the political thrust has turned on the issue of maintaining employment. The efforts by governments to deal with the crucial question of jobs have fallen between two poles. In some cases nations have been able to forge support for wealth-maximizing, growth-oriented policies that facilitate the mobility of resources. Examples include general labour-adjustment schemes for relocation and retraining, and sectoral programs for rationalization and restructuring (US General Accounting Office 1979; Magaziner and Hout 1981; Mahon and Mytelka 1983). In other instances the policy outputs have been piecemeal, narrow interventions that shield labour and/or

capital from pressures to adapt. Trade protection, and unconditional regional subsidies are examples of such policies that postpone adjustment (Morici, Smith, and Lea 1982; Grant 1982; Warnecke 1978; Courchene 1981). Bailouts in the form of specific subsidies that maintain the jobs and outputs of failing firms are among the most visible examples of adjustment-retarding policies. Although there is much variation in the frequency and the mode of bailouts, virtually all industrialized nations have rescued failing firms at some time (Curzon-Price 1981; Dyson and Wilks 1983a; Pinder 1982). What is the incentive structure that leads politicians to respond to economic distress with a firm-specific bailout?

Chapters 3 to 6 have considered the conventional economic rationale for bailouts. The economic justification is limited to various cases of market failure. Otherwise, according to standard economic theory, government rescues of failing firms are in opposition to the efficient workings of the market and should not be on the policy menu (Watson 1983). The purpose of this chapter is to consider bailouts as political phenomena. The analysis is positive rather than normative. The object is to develop a framework that will both account for Canada's general propensity to employ bailouts as a means of adjustment and discern the political motivation for individual decisions to rescue particular firms.

The political perspective is crucial to the analysis of bailouts. Public rescues, whether or not justified by economic theory, are the outcomes of the political process. It is therefore appropriate to expect a model of bailout decisions to be built upon the workings of political incentives. However, the political system cannot be divorced from the economic system. Provision of a political perspective on bailouts does not force a choice between political and economic forces. Rather, it offers a mode of explanation that is based on the interplay of the political and economic systems (Hirsch and Goldthorpe 1978; Alt and Chrystal 1983; Lindberg 1975).

The more fundamental reason for pursuing a political analysis is that bailouts, like other forms of policy, are expressions of distributional conflict over who gets what and how they get it (Trebilcock et al. 1982; Becker 1983; Hartle 1984; Stanbury and Lerner 1984). Thus, explanation must focus on the efforts of groups of individuals to maintain (and increase) their comprehensive net worth under changing economic conditions (Hirsch 1978; Hartle 1979). Policy outcomes are viewed as self-interested responses of politicians to the demands of groups with particular economic interests (Gourevitch 1977; Hall 1984; Hillman 1984).

The political case put forward here draws on two perspectives. The first focuses on the structural and institutional characteristics of the political economy that imply incentive structures that are likely to lead to bailouts as policy outcomes (Zysman 1983; Dyson and Wilks 1983a; Richardson 1982; Katzenstein 1978). The objective is to link institutional and structural attributes to a particular pattern of decision-making. The organization of labour, business and government itself are considered here insofar as they shape the demand and supply of policy. What is the effect of the economic milieu and the organization of economic interests in determining requests for assistance? What characteristics of the state render it hospitable to demands for *ad hoc* subsidies to marginal firms?

The second order of political analysis builds on the first. Given certain structural and institutional characteristics that determine the demand for and general propensity to supply bailouts, what is the micropolitical calculus that gives rise to an individual rescue? This chapter also attempts to outline the framework of incentives that make it politically rational to help some firms and not others. Taken together, the two orders of analysis provide a political perspective on the circumstances that induce governments to help marginal firms and the factors that determine the choice of rescue instrument.

Each of the two approaches, which represent different routes into the analysis of bailouts, yield propositions for the likelihood of public rescues of marginal firms. The two are not mutually exclusive; the broad factors that emerge in the first no doubt condition the interplay of situation-specific factors at the micro level. Conversely, the individual circumstances that determine a particular bailout undergird the broad patterns and trends. The aim here is not to try to account for any one specific decision but rather to put forward a model that locates typical governmental responses to firm-specific failures within the workings of the Canadian political system. The application of this model to the fourteen bailout case studies is contained in Chapter 8.

THE ECONOMY AND THE ORGANIZATION OF INTERESTS

Political analysis of public policy must take account of the economic and social context within which government decision-makers operate (Simeon 1976). It is often argued that the broad nature of a country's general economic problems shapes the role of the state (Kurth 1979;

Gerschenkron 1962). Thus, for example, the need for late-industrializing nations to amass large concentrations of capital and labour make it likely that the government would play an essential role in industrialization.

Strength and structure of the economy

The overall strength of the economy needs to be considered in accounting for adjustment-policy differences. The soundness and competitive strength of the overall economic system makes it easier for the economy to absorb (and redirect) those resources that should exit from declining sectors (Dyson and Wilks 1983a, ch. 1; Ritchie 1983). Sustained growth and affluence increases the options for displaced workers and hence reduces the pressure for bailouts to preserve employment. In Table 24, the principal economic indicators of growth and productivity and national economic performance are shown for Canada and several other industrialized nations. Although there is indeed much debate over the assessment of relative national economic performance (Lawrence 1983; Scott 1984), Canada's low productivity growth and high levels of unemployment suggest it is likely that potentially redundant workers will look to government for help.

The structure of a nation's economy also shapes the particular adjustment problems faced (Boltho 1982). Of the several structural characteristics of the economy that have been logically and empirically related to differences in its capacity to adjust,¹ openness is a factor that may render bailouts more likely. Openness, as measured by exports and imports as a fraction of the GNP, is an indication of the extent to which a country may be buffeted by events outside the domestic arena. Not only does openness mean vulnerability, it also detracts from the efficacy of domestic macroeconomic policies to counter the impact of exogenous shocks (Krasner 1978; Ontario Economic Council 1980). There is extensive evidence that during the 1960s and 1970s, nations with more open economies acted predictably to compensate for their weaker capacity to utilize macroeconomic levers. Cameron (1978) finds that the openness of the economy leads *inter alia* to an increase in the size of the tax sector. He argues that the reason for the expansion of the tax sector is that the instrument of taxation and subsequent expenditures are the means by which the open economies cope with dislocations generated by the international economic system. In the same vein, recent comparisons of OECD

TABLE 24

Average GDP growth, productivity growth, and unemployment rates, 1960-71 and 1972-81^a

	Canada	United States	United Kingdom	Japan	France	Germany
Growth of real GDP (per cent change)						
1960-1971	5.2	3.6	3.0	10.4	5.7	4.9
1972-1981	3.8	2.8	0.9	4.7	2.6	2.2
Growth of productivity (real GDP per person employed, per cent change)						
1960-1971	2.6	1.8	2.8	8.6	4.8	4.2
1972-1981	0.8	0.8	1.8	3.6	2.5	2.6
Standardized unemployment rates (percentage of total labour force)						
1964-1971	4.4	4.3	2.9	1.2	2.0	0.8
1972-1982	7.8	7.2	7.8	2.0	5.6	3.7

^a For average unemployment rates the years 1964-71 and 1972-82 were used.SOURCES: Department of Finance (1984) *Economic Review* (Ottawa: Minister of Supply and Services), 231; OECD (1984) *Economic Outlook, Historical Statistics 1960-82* (Paris: OECD), 26.

countries over the last two decades find that the 'domestic repercussions of an open economy required an active social-security policy stance on the part of the government' (Schmidt 1983, 13).

Canada is generally considered to be an open economy. As of 1982, exports and imports made up 43 per cent of Canada's GNP. This compares with 15 per cent in the United States, 42 per cent in the United Kingdom, 38.5 per cent in France, 25 per cent in Japan, and 50 per cent in West Germany (OECD 1984). When the deep recession of the 1970s left many industrialized nations with high levels of unemployment and high inflation, the other open economies with comparable rates of unemployment and inflation increased their welfare expenditures by as much as 7 per cent per year (OECD 1973-79). In Canada the increase was 0.8 per cent. The explanation of Canadian welfare policy during the 1970s and 1980s and its comparison to that of other OECD nations is clearly beyond the scope of this project. However, in the absence of more general

policies to ease adjustment costs, the bailout as a policy response becomes more explicable.

How can we predict whether a nation under stress will move toward narrow, ad hoc interventions or more comprehensive welfare measures? Schmidt (1982) makes the point that:

the correlation between openness of the economy and public policies remains incomplete insofar as it fails to specify the linkage through which the pressures and imperatives inherent in economic circumstances are fed into the policy formation process and ultimately transformed into policy outputs.

For Schmidt, the crucial political links between economic factors and policy outputs are such extra-parliamentary elements as the strength of trade-union organization and the degree of institutionalization of corporatist arrangements (arrangements in which labour along with government and management share in the resolution of conflict and the determination of economic policy) (Schmitter 1981; Schmitter and Lembruch 1979; F.L. Wilson 1983). The open economies that deal with external shocks through wider taxation and subsequent increases in welfare expenditures are nations with strong working-class-based political parties and/or corporatistic structures that provide political access for labour interests (Esping-Anderson and Friedland 1981; Korpi 1980; Bornstein 1984; Cameron 1978).

The effect of labour

The structure and strength of labour organization is a key characteristic of the political economy in determining support for positive adjustment (Gunter 1975; Lange et al. 1982; Gourevitch 1984; Hayward 1980). More cohesive, encompassing, labour organizations will respond to policy from the perspective of a national constituency, but when labour groups are more dispersed their positions may depend on the impact of the proposed policy on their particular sectors (e.g., export-oriented vs. domestic producers, public vs. private). Effectively centralized labour organization also means that leaders are better able to resist pressures from the rank and file and can take the long-term view (Flanagan, Soskice, and Ulman 1983). Where there are centrally organized national labour movements they are unlikely to call for narrow defensive solutions. As M. Olson

(1982, 48-53) spells out, these more encompassing unions (or business organizations) have an incentive to support policies designed to facilitate adjustment and make society more prosperous. (See also Zysman and Tyson 1983; Reich 1983a; Katzenstein 1978.)

Although Olson focuses primarily on the organizational variable, it must be pointed out that political strength of labour is also a necessary condition for attenuating demand for narrowly defined policies. It is only with political power that there is some guarantee that if labour does support cost-internalizing, nationally oriented policies, it will necessarily share in the benefits of national economic growth.

Bailouts are more likely to be sought if there is a fragmented labour movement, or a nationally organized labour movement which has failed to achieve a strong national political voice either through the party system (i.e., no strong party of the left), or by direct access through tripartite or corporatist arrangements. Particular bailouts or other protectionist measures may reflect pockets of regional labour strength or labour's effectiveness within a single sector. The more widely organized and the more politically powerful the labour movement, the less the incentive to press for narrow, adjustment-retarding assistance for a small group of its members. Instead, the more encompassing organization has an incentive to pursue a collective-gain strategy aimed at improving the nation's economy.

In Canada the trade union is fragmented and is not a significant participant in national policy-making (Panitch 1979; Adams 1982). Of the 216 unions in Canada only sixteen have more than 50,000 members (Chaison 1982; Morton 1982; Miller and Isbester 1977). This fragmentation is further reflected in the decentralized bargaining structures. Bargaining typically takes place at the level of the firm, whereas in other nations labour is more centrally organized and bargaining takes place at the industry or national level (Dunlop and Galenson 1978; Reynaud 1980; Blythe 1979).

The fragmentation of the union movement, the dependent nature of the Canadian economy, and the ambivalence toward corporatism within the labour movement has created an unlikely foundation for labour's role in national tripartite policy-making structures (McBride 1983). Nor has labour been able to achieve a strong political voice through the Canadian party system. Unlike the German, Swedish, or British cases, the Canadian party associated with the labour movement, the New Democratic Party, has not been able to monopolize labour support with enough

success to come to power nationally. In sum, the fragmented structure of Canadian labour is unlikely to generate pressures for growth-promoting adjustment policies. Moreover, in the absence of such policies that can ease the transitional costs of labour, the only option for concentrations of displaced workers is to urge government to 'save jobs' and to inhibit the shrinkage of marginal firms.

Even if labour lacks the degree of integration and political strength that makes it likely to press for policies of positive adjustment, the demand of business organizations remains. Here, too, Olson's initial insight still obtains; it is only when producer groups are widely based, encompassing an entire sector, that they have incentive to support policies that benefit a national constituency. In the absence of such organization, producers have the same incentive as labour to champion myopic policies that pass the costs of assistance on to others. The narrower the group, the more likely is its cost-benefit analysis of policy to lead to demands for protection (Thurow 1980).

The industrial-financial relationship

In Canada, producer groups also are fragmented. Here the effects of federalism are apparent. Most business groups are organized on both a regional and a national basis. Although every industry sector may have one or more trade associations and there are horizontal associations like the Business Council on National Issues, the Canadian Manufacturers' Association, and the Canadian Chamber of Commerce, there is little evidence of sufficient cohesion to provide a basis for cogent demands for positive-adjustment policies (Beigie and Stewart 1985; Murray and McMillan 1984). Canadian-government consultation with the private sector, as in the Tier I and Tier II sector exercise in 1977 and 1978, has resulted in shopping lists and wish lists for narrowly defined producer groups rather than sector-based strategies of adjustment (Brown and Eastman 1981; Yudelman 1985). In other political settings, integrated producer groups have been built into the policy-making process and subsequent policy outputs facilitate the competitive adjustment of an entire sector (Hills 1981; Dyson 1982). In Canada, there is limited evidence of sectoral, much less national, adjustment policies emerging from business and government consultation (Thorburn 1984; Atkinson and Coleman 1983; Tupper 1981). Typically, labour and management in failing firms seek government assistance to preserve the status quo

rather than lobbying for policies of adjustment that might involve rationalization and shrinkage.

The relationship between the financial system and the private sector is another strand in the analysis of structural characteristics that determine patterns of bailout policy (Zysman 1983). Integration between the banks and private companies appears to reduce the likelihood of government bailouts. When banks are closely linked to companies they are in a position to pick up early signals that a company is in trouble. The early warning coupled with the abundant information may enable the bank to effect a change in management or impose a new direction on the troubled firm long before the situation reaches the crisis stage. Along with their equity holdings there also comes commitment to maintaining the client companies. Thus the banks can demand rationalization and restructuring of a marginal firm before the situation becomes a crisis. Where the banks have an arm's-length relationship with private-sector firms, they are unlikely to interpose themselves between the firm and the government. When the banks call their loans, thus precipitating the firm's financial crisis, the marginal firm then turns to government and poses the stark choice: accede to the firm's request to intervene and save jobs or let the firm die. In the integrated system, the banks are likely to provide earlier, less politically based assistance that is predicated on rationalization or saving the firm rather than on preserving jobs.

Although the Canadian banking system (five banks account for 90 per cent of total assets) is as highly concentrated as the European systems, the relationship of the Canadian banks to industry is more similar to that in the United States or Britain where there is an attenuated relationship between companies and their banks (Molot 1977; Zysman 1983). Under Canadian federal legislation, banks are restricted in their ability to assemble interests in nonfinancial companies. The Bank Act forbids holdings above 10 per cent, except in temporary cases. Holdings above 10 per cent must be disposed of within two years, unless the banks receive an extension from the Minister of Finance. Therefore, Canadian banks are unlikely to be so deeply involved in companies that they can act as early warning systems to anticipate problems as banks do in Japan. Nor are Canadian banks sufficiently informed to be able to formulate and monitor restructuring and reorganization rescues as banks do in Germany. Given the above, it is clear Canadian banks do not function to reduce the demand for government-led rescues. Indeed they may be

themselves a source of pressure for bailouts. If parts of the financial system are left heavily exposed by the impending firm failure, the banks may be the real beneficiaries of a bailout.

In summary, the following factors are likely to give rise to demands for bailouts:

- 1 Open economies with, relative to other open economies, low welfare spending.
- 2 Decentralized labour organizations with local or regional strengths.
- 3 Fragmented business organizations.
- 4 Arm's-length relationship between the banks and industry.

INSTITUTIONS AND THE SUPPLY OF BAILOUTS

What are the institutional and structural conditions that render governments receptive to demand for ad hoc interventions? Bailouts are less likely when the state can deny access to or resist narrow pressures for assistance and/or when a government is able to initiate its own policies to facilitate economic adjustment and industrial development (Dyson and Wilks 1983b; Green 1981; Zysman 1983). These properties are largely determined by the degree of centralization and integration within the public sector.

The federal system

Parliament notwithstanding, no institution has such a pervasive impact on Canadian politics as the federal system. No thorough analysis of public policy-making in Canada has been able to ignore the ways in which Canadian federalism shapes policy. The interactions between the two levels and among regions is a crucial dimension in policy formulation (Schultz 1980; Tupper 1981; Careless 1977; Doern and Toner 1985; Maxwell and Pestieau 1980; Banting 1982; Norrie 1984). It structures the way interests are represented, accommodated, and reconciled. In the case of economic adjustment the division of power among eleven governments has several implications. The decentralization means multiple access points for those prejudiced by changing economic conditions. The provinces often act as spokespersons for the interests special to their region. The high degree of industrial concentration and regional economic specialization in Canada means that there are several distinctive regional economies. This distinctiveness has

resulted in provincial governments often taking narrow stands as they act as representatives of their specific economies (Stevenson 1982; Simeon 1979). As Jenkin (1983) and others (Trebilcock et al. 1983; Tupper 1981) point out, each of the provinces has sought to cope with economic change by providing benefits for its local economy at the expense of other regions. When those firms and workforces that stand to be hurt by economic decline are concentrated in a single province and particularly in one-sector communities, provincial governments are likely to become strong advocates of these interests, joining with the affected workers and firms to lobby Ottawa for assistance. One reflection of such provincial concern at the expense of more growth-promoting general adjustment has been their emphasis on employment maintenance as a condition for bailouts, even though downsizing and restructuring may be necessary for the firm's and the sector's viability.

Each province has sought to develop and protect its own markets. These efforts make it very difficult to establish the coalition necessary for positive adjustment. Indeed, one of the key problems often raised in discussions of 'Canadian industrial strategy' is how to provide channels for the expression of regional interests at the national level and then how to integrate disparate provincial interests (Jenkin 1983; Thorburn 1984; Tupper 1981).

Constitutions which fragment decision-making powers not only provide greater access for narrowly defined interests, they also provide incentives for politicians to impose on others the costs of policies that benefit constituency groups (Simeon 1976). Policy outcomes in such a system are the results of bargaining among numerous narrow interests rather than from broader perspectives of greatest national benefit. As Simeon (1976) points out, the concern becomes 'who will bear the costs?' rather than 'what should be done?'. In short, distributive concerns dominate allocative ones. Michael Jenkin describes the problem:

Perhaps even more important, however, has been the manner in which the character of economic development has profoundly affected the nature of regional conflict . . . As a result, different patterns of economic development and interests have evolved, with provincial governments becoming a natural focus for those interests. The direction in which industrial policy is evolving elsewhere, with its emphasis first on sectoral, and now on firm-specific action, poses special problems for a country with terri-

torially diverse interests. The decision to support, or indeed, to rationalize a particular form of industrial activity, especially at the firm level, inevitably has territorial implications when economic activity is so regionally specialized. Support for one industry or one firm is seen as support for one region or province rather than another. It is in this sense that it has become virtually impossible to discuss industrial policy in Canada without immediately addressing the problem of regional economic competition and its political manifestations – federal-provincial and interprovincial conflict. (1983, 25-6)

In a unitary system, or a federal one in which there are strong inter-governmental bodies, it is more likely that the costs and benefits of policy will be internalized and hence the allocative dimension of policy can be addressed.

The structure of the executive

Bureaucratic organization is the other main institutional characteristic that bears on the supply of bailouts. As in the federal systems, the diffusion of policy-making responsibility, here across departments and agencies, provides numerous points of access for narrow interests. Decentralized agencies often become the advocates for their clientele. There is little incentive for the agency to go beyond the narrow perspective of its clients. Decentralized agencies allow decision-makers to perceive rewards from externalizing the costs of constituency-benefiting policies. In the absence of a co-ordinating institution that has a broad perspective and the ability to impose central control, policy outcomes are likely to be a series of adjustment-retarding responses put forth by competing agencies to protect their clientele. This is not to suggest that in a more centralized, institutional setting losers will be ignored or left to bear the costs of adjustment. However, more centralized institutions are likely to internalize both the costs and the benefits of policy, and thus are more likely to espouse assistance policies that promote rather than retard adjustment when responding to the demands of those threatened by economic change.

Although states which have an integrated structural capacity that is conducive to internalizing the costs and benefits of policy are less likely to use *ad hoc* bailouts to respond to economic problems, sometimes they are susceptible to demands for protection. As will be evident from the

micropolitical calculus discussed in the latter part of this chapter, no government can afford to ignore a large political constituency that has been forged by the anticipation of immediate personal-adjustment costs. However, the few bailouts that arise in more integrated policy settings are the outcomes of attempts to buy off politically effective interests that seek to veto wealth-maximizing policies such as trade liberalization.

A changing framework

Throughout the prosperous 1960s, Canada's industrial policy consisted of a patchwork of incentive programs. Doern and Phidd describe policy-making in that decade as characterized by 'small sporadic bursts of concern about individual dimensions of industrial policy. Industrial policy was "ad hocism" practiced with a vengeance' (1983). In 1969, two of the main sources of industrial programs were merged into a single Department of Industry, Trade and Commerce. The joining of the Industry Department's concern with Canadian manufacturing development and Trade and Commerce's focus on overseas trade resulted in what Thorburn (1984, 80) describes as a sprawling, clientele-oriented empire, accumulating sometimes contradictory programs and lacking an overall thrust (see also Williams 1981). Moreover, during the 1970s, the problems of policy co-ordination and integration extended far beyond the confines of Industry, Trade and Commerce. Policy initiatives that bore directly on industrial change were coming from several federal departments including Regional Economic Expansion (DREE), Energy Mines and Resources (EMR), Employment and Immigration, and Finance, as well as from the provincial governments.

From the mid-1970s to the present, Ottawa has continued to seek an effective agency and framework to co-ordinate the many strands of industrial policy. The numerous structural changes indicate the difficulties of locating appropriate centres of political power to co-ordinate industrial policy (Doern and Phidd 1983, 395; see also Morici et al. 1982). Focusing on the problems at the centre, Richard French (1980) attributes the failure of Canadian industrial policy during this period to the conflict among the existing planning agencies: the Privy Council Office (PCO), the Department of Finance, and the Treasury Board's planning branch.

The co-ordinating civil-service committees – the Interdepartmental Committee on Trade and Industrial Policy (ICTIP) and 'DM 10', a group of economic deputy ministers – established in the mid-1970s were unable to

create an effective environment for the consideration of long-term, economic-development needs: 'Canadian industrial policy remained a series of benefits and supports provided by politicians for their specific constituencies and clienteles' (Jenkin 1983; Thorburn 1984).

By the late 1970s the mechanism for co-ordination shifted directly to Cabinet. In 1978, the Board of Economic Development Ministers was created. It was the forerunner to the Cabinet Committee on Economic Development (CCED) which in 1982 became the Cabinet Committee on Economic and Regional Development (CCERD). The cabinet committees were serviced by a secretariat known as the Ministry of State for Economic Development (MSED) and later the Ministry of State for Economic and Regional Development (MSERD). MSED (MSERD) was presented with the task of bringing some coherence to an amalgam of diverse programs. Although the objective was for MSED to articulate a coherent approach within which individual departments could develop their own policies, MSED was not free to formulate an overall strategy (Thorburn 1984, 106). Its primary role was at best integrative rather than innovative. It sought to co-ordinate existing policy strands and to work out a consensus among very disparate values and objectives.²

The difficulty of interweaving a common prospective from among the sometimes conflicting economic, political, and social values represented by the various departments and agencies became more obvious with the appearance during the early 1980s of two competing policy frameworks, one from Industry, Trade and Commerce and the other from MSED. Each called for a distinct direction for Canadian industrial policy. The first one, introduced by the Honourable Herb Gray, Minister of Industry, Trade and Commerce, was a highly interventionist document that sought, *inter alia*, targeted assistance for Canadian winners in high technology and manufacturing. The MSED paper, *Economic Development for Canada* was far less interventionist. It sought Canadian economic success by focusing on the importance of natural resources and strengthening Canada's traditional comparative advantage in the production of basic commodities (Doern and Phidd 1983, 434-40). The 1981 *Statement on Economic Development for Canada in the 1980s* appeared to merge the two approaches without coming to grips with the difficult choices and trade-offs that are crucial to the formulation of an effective policy framework.

The latest round of structural reorganization for economic-development policy is no more likely to provide a clear focus for policy-making than those of the past. In 1982, responsibility for trade was shifted to External Affairs, away from the other industrial-development concerns in Industry, Trade and Commerce. At the same time, DREE and Industry, Trade and Commerce were merged. The Department of Regional and Industrial Expansion (DRIE) became the single home of regional and industrial-development policies. Both the new DRIE and MSERD greatly expanded their regional offices to increase their capacity to consult with and reflect regional interests. At present, Michael Jenkin's pessimistic evaluation of Canada's industrial-policy machinery is shared by many observers: 'The federal government still lacks an institutional mechanism capable of addressing industrial-strategy questions . . . The institutions which have been created have the potential for real conflict and confusion' (1983, 168).

Given their constituencies and organizational mandate, no one federal department or ministry is likely to be the prime actor in putting forth broad-based policies of positive adjustment. Several, however, may have a basis for supporting incremental assistance to the private sector. In spite of government's large-scale involvement in the economy (Howard and Stanbury 1984), the resulting thrust has been a movement of financial resources out of declining industries and firms and into growth sectors (Morici, Smith, and Lea 1982). Within Industry, Trade and Commerce and other departments such as Employment and Immigration, there have been a variety of responses to economic dislocation. For example, Canadian trade policies have tended to protect domestic producers through tariff and nontariff measures (Jenkins 1980; Harris and Cox 1984; Protheroe 1980). Labour-adjustment schemes in declining sectors like textiles and automotive products have had limited success (Saunders 1984; Jenkins 1980). General labour schemes have been too limited in duration, too low in benefits, and too constrained in eligibility to be an attractive option for potentially displaced workers (Saunders 1984). The firm-specific subsidies have tended to provide assistance to the weakest firms in an industry.

When political responsibility is dispersed, the relevant constituencies of decision-makers are often narrow segments of the polity. In the absence of some mechanism for integrating these interests, the result is likely to be uncoordinated and inconsistent policy-making. Moreover, bargaining and reciprocity within a decentralized political process are

not likely to produce the net-benefit outcomes produced by institutions of central control (Alt and Chrystal 1983, 218).

In sum, the structural characteristics which increase the likelihood of bailouts also increase the fragmentation of responsibility. The diffusion of power between federal and provincial governments and the distribution of responsibility within the executive of the national government provide multiple points of access for narrowly defined interests and little basis for the internalization of the costs and benefits that underlie policies of positive adjustment. Narrow demands are met with narrow policies. The structural factors that give rise to the supply of bailouts are:

- 1 A constitutional system with few avenues for integrating jurisdictional interests.
- 2 A fragmented bureaucracy that lacks effective policy co-ordinating mechanisms.

THE POLITICAL CALCULUS

The decision to intervene

Taking existing Canadian political institutions and organizations within the public and private sectors as given, this section concentrates on the incentive structures that operate in shaping particular policy decisions. Using a public-choice framework, an attempt is made to discern why some failing firms are rescued and others are not. Further, if there is a decision to intervene, what determines the choice of instrument? The public-choice framework assumes, as its basic behavioural postulate in collective decision-making, self-interested utility maximization on the part of all affected individuals (Mueller 1979; Hartle 1979). Unlike the market-failure justifications described in the economic analysis of the previous chapters, the political case for an individual bailout is driven by the distributive effects of state action. Bailouts result from the pressures exerted by concentrated interests and the net benefits accruing to governments in responding to those interests (Trebilcock et al. 1982, ch. 2).

A decision-making framework

Given the above perspective, the following more specific axioms are advanced to describe rational political behaviour within the incentive structures that face political actors (*ibid.*, ch. 3).

1 It is in the interests of a governing party to choose policies that confine the benefits to marginal voters and confine the costs to inframarginal voters (essentially, swing voters in swing ridings).

2 In order to overcome the information costs faced by marginal voters, it is in the interests of a governing party to choose policies that provide benefits in concentrated form, so that their visibility is enhanced, and to impose the costs in dispersed form, so that their visibility is decreased.

3 A governing party cannot choose only policies that provide highly concentrated benefits; the more visible the benefits, the smaller the group of voters on which a party can realize a political return.

4 It will be rational for a governing party to treat highly concentrated or well-endowed interest groups as marginal voters to the extent that they possess leverage. Such leverage may be the ability to provide, or threaten to provide, subsidized, selective information directly to marginal voters and hence change their political preferences, or to provide resources with which *the governing party* can, in turn, either confer benefits on marginal voters or provide subsidized, selective information to marginal voters intended to influence their political preferences.

5 A governing party is likely to attach special weight to the views of bureaucrats in order to secure their co-operation in implementing policies. Bureaucrats, in advising their political overseers, will have a tendency to favour policies that have a heavy bureaucratic orientation (more jobs, larger fiefdoms, and more power and prestige). The virtues of noncollective, decentralized forms of resource allocation are likely to be depreciated.

6 The more widely dispersed the groups of marginal voters benefited by a chosen policy, the less real the benefits need be.

7 Perceived benefits can be made to appear greater than real benefits through the provision by a governing party (typically through the mass

media) of subsidized, selective information, often of a highly symbolic nature.

8 Where conferring benefits on a relatively dispersed group of marginal voters requires that costs be imposed on a relatively concentrated group of marginal voters, a governing party will be well-served by a policy instrument that minimizes real costs over time. In addition, it will be in the interest of the governing party to obscure the erosion of real benefits by offering the beneficiaries symbolic reassurances of continuing commitment to the initial policy.

9 Where the dispersion of costs does not fully obscure their existence from the marginal voters who are bearing them, it will be in the interests of a governing party to provide subsidized, selective information and symbolic reassurances; costs will be represented, to the extent they are perceived, as 'sacrifices' or 'investments' made to secure long-term benefits.

10 It will be rational for a governing party to choose policy instruments that confer benefits, or perceived benefits, on marginal voters throughout, or at least late into, the current electoral time period, while attempting to defer the real and perceived costs borne by other marginal voters to some later point in time. Where this is not possible, instruments may be chosen that impose these costs at the beginning of the current electoral time period rather than at the end, so as to exploit incomplete voter recall. For similar reasons, at election time a governing party will tend to offer policies designed to maximize voter support; between elections, the tendency will be to offer policies that maximize interest-group support.

11 Where a governing party is uncertain about the impacts of alternative policy instruments on a) marginal-voter interests; b) marginal-voter awareness of these impacts; c) the intensity of voter preferences surrounding these impacts; or d) opposition parties' alternative policy proposals on these issues and voter responses thereto, it may be rational to choose an instrument that maximizes reversibility and flexibility. Such a course facilitates continuous marginal adjustments to balance interests.

12 In the case of policies that impose real and perceived costs on marginal voters, it may be rational for a governing party to assign their

administration to an 'independent' agency of government. In so doing the causal relationship between the costs and the party is attenuated in voter perceptions.

13 Widely dispersed interest groups and groups of voters who possess inferior information-processing capacities are particularly vulnerable to policies employing the substitution of symbolism for substance.

14 Recognizing the limited investment in information about policy issues that most voters are willing and able to make, the media often will tend to trivialize complex policy questions (both issue identification and proposed solutions). To produce many stories quickly and retain public attention, the tone may tend toward advocacy of simplistic, collective policy responses to perceived matters of public concern. Because the public may be influenced by this advocacy, politicians may also be compelled to attach weight to it.

Size and location of firm

To situate bailouts within the framework of these axioms, the location and size of the failing firm appear to be crucial variables. Demands for assistance would seem most politically salient when they are made by firms located in marginal ridings (i.e., those ridings in which there is no record of consistent electoral preference for one party over the others). For these demands to have political force, a significant number of voters in a marginal riding must support them with relative intensity. For individuals directly threatened by loss of job, there is little doubt that the stakes are high. To the extent that these workers also face losses of specific human capital, of resale value of homes in dependent communities, pension entitlements, and/or nontransferable, nonportable assets (Green 1984), their demands will be even more intense. The larger the firm, the greater the number of mobilized individuals. Moreover, greater size and concentration implies that others in the community will be prejudiced by mass layoffs. As described in Chapter 4, the negative effects of a firm's failure can go far beyond its workers. In communities where the firm is the main employer, the extension across the community of the costs of the firm's failure helps to forge a political constituency for state intervention. Any riding may become marginal when faced with the failure of a very large firm (and the subsequent

mass layoffs and attendant effects on the community); the voters' allegiance to the party in power is likely to be contingent on assistance.

A government will be particularly sensitive to demands for rescue if the affected community is located in a region where continuing support is crucial to electoral survival. Given the regionally differentiated support bases of the two major federal parties in Canada (until recently), this has been a particularly crucial consideration. The federal Liberal party principally depended for its political support on Quebec, Ontario, and the Maritimes. In these provinces, the economic costs of firm failure are likely to translate into substantial political costs. This is likely to remain true to a significant extent, even in the current political environment where the federal Progressive Conservative government now draws substantial political support from these regions. Thus, regional divisions of economic activities and political influence make both federal and provincial governments particularly susceptible to claims for protection from many of Canada's most economically troubled industrial sectors.

Political costs

Although the size and location of the failing firm are important considerations in determining the salience of the demands that politicians are likely to face, we cannot assess the political rationality of responding to such demands without taking into account the political costs. If, absent market failures, bailouts are policies that generally reduce national income and retard the mobility of resources, why do voters countenance costly rescues of marginal firms? In large part, the answer is that the gains and losses from rescues are not evenly distributed or equally visible. In this context, demands are likely to be met because the workers who stand to gain from the subsidy have much more concentrated stakes in the particular policy issues than the voters upon whom the costs are externalized.

For most of society the impact of a particular rescue is widely dispersed and thinly spread and thus few other individuals stand to gain or lose very much as a result of the choice of policy. As a consequence of their very limited individual stakes in the issue, voters have highly constrained incentives to invest in the acquisition and evaluation of information about the issue (rational ignorance), and are unlikely to mobilize themselves collectively to oppose the rescue (Olson 1965).

Politically, concentrated interests tend to prevail over dispersed interests even though the long-run result may be worse for everyone.

Although the benefits of maintaining the firm's jobs and output are highly visible, the costs of bailouts are often much harder to discern. The costs are easily obscured when rescues are carried out by off-budget instruments like loan guarantees and loans at below-market interest rates. Even on-budget expenditures like cash subsidies and government procurement can operate in a low-visibility, piecemeal, discretionary fashion with the actual costs difficult to isolate and quantify. The jobs saved by the rescue will be immediate, recognizable, highly visible, and often highly concentrated, while jobs lost through misallocation of resources will be dispersed throughout the economy and, over time, will be largely invisible losses. However, in the long run, the net impact on employment is likely to be negative.

The role of the media

Politicians, faced with an intense, geographically concentrated political constituency demanding immediate subsidy and widely dispersed and largely unmobilized cost bearers (i.e., labour and capital in other firms, consumers, taxpayers, etc.), will engage in a political calculus that likely yields to the demand. Bailouts are an attractive political strategy for magnifying the gain and depreciating the pain.

If the obscurity of bailout costs is an important component in the decision-makers' calculus, what is the impact of the media? By publicizing the cost of a bailout, the media is likely to increase the political costs of a rescue and may lessen their likelihood. However, this premise overlooks basic media characteristics and incentives (Trebilcock et al. 1982, ch. 2). The media tend to simplify complex issues and focus attention on easily comprehended aspects of a problem. Given the need to convey digestible chunks of information, the coverage of a firm's potential failure tends to centre on the immediate loss of jobs and very real attendant hardships. The problem is most often stated in terms of how many jobs will be 'lost' or speculation about the plant being 'saved'. There is little incentive for the nonspecialist media to portray a firm's failure in the context of strategies for coping with economic decline, facilitating the mobility of resources or assessing the costs of the inefficient allocation of resources, caused by adjustment-retarding policies. Although the media may bring some visibility to the budgetary costs of

bailouts, its predominant role is to reinforce the prevailing political calculus by focusing on the concrete, short-term benefits of a bailout.

A failing firm can be both a direct and indirect threat to politicians' electoral prospects. Besides mobilizing an intense constituency whose support is contingent on direct benefits, the failure of a firm may also appear to jeopardize central policy objectives of a government such as regional development, technological sovereignty, or Canadianization of resource sectors. The symbolic importance attached to the survival of a particular firm is not always determined solely by the government; the opposition parties may use the linkage as evidence of the failure of the government's policies. The perceived relation between the firm and the government's central policy concerns has two implications for bailouts. First, it may add force to the workers' and owners' demands for assistance because it adds to the political costs of nonintervention. Second, the connection between the firm and national policy objectives provides a symbolic justification for the rescue which may make it easier to impose the costs of the bailout. The costs can be represented in terms of the investments necessary to secure broad public goals.

Why bailouts?

The political case has focused on the institutional and strategic factors that give rise to bailouts. In fact bailouts are one of several adjustment-postponing responses to economic distress. Trade protection, unconditional regional subsidies and some labour-adjustment policies may also be explained by much the same political conditions as the bailout. In each case, narrowly defined interests are able to mute market signals and externalize their costs onto dispersed cost-bearers. However, despite important similarities these other adjustment-retarding policies are not direct substitutes for firm-specific rescues. A number of characteristics make the bailout a unique, politically attractive mode of assistance. The basic appeal of the bailout is, first of all, a function of time pressures; often, only an immediate infusion of capital can help a firm about to go bankrupt.

Politicians have several other incentives to adopt bailout policies. Rescues permit immediate and effective targeting of assistance on a marginal firm rather than the more blunt approach of industry-wide trade protection, regional assistance, or general labour programs. Further, in contrast to trade protection, the bailout is less likely to spur

possible international retaliation. If the emphasis of the intervention is on immediate assistance to workers, there are more opportunities for concealing or depreciating the costs of bailouts than in the costs of general labour-adjustment schemes. Labour-oriented adjustment policies cannot readily avoid major explicit public expenditures.

Unlike more industry- or sector-wide assistance, firm-specific bailouts spare politicians' having to acknowledge that an industry has no long-term future or has been 'written out' of the economy. In the same vein, by focusing on an individual marginal firm rather than general labour problems, the government does not have to acknowledge or come to grips with fundamental problems that beset the economy. Bailouts can be justified in the symbolically reassuring manner of 'saving jobs'; a program for a declining industry or redundant workers is a more grim notion.

In summary, the political framework yields a set of policy implications for likely responses to economic distress. Within the general context of adjustment policies, politicians face incentives to adopt firm-specific rescue policies that maintain jobs for concentrated groups in ways that have low-visibility costs and are symbolically reassuring.

The choice of instrument

Once a decision to intervene has been made in principle by government, the form of the intervention must be decided. There are various instruments that can be chosen: cash subsidies, loans, loan guarantees, credit insurance, partial equity, outright public ownership, tax relief, trade protection, government procurement policies, or regulatory protection. Governments must decide between some form of subsidy that maintains the firm in the private sector or an action that deepens government involvement with the marginal firm and brings it into the public sector. The political attraction of turning a marginal firm into a crown corporation can be traced largely to the legal and institutional attributes of crown corporations (Trebilcock and Prichard 1983). The sources of funding and mechanisms of accountability attached to state enterprise help to obscure any continuing costs of the rescue. Public takeovers such as bailouts may also be attractive because of the relatively low monitoring and information costs and the high symbolic benefits. In the typical rescue case (maintaining a firm to preserve jobs), the government faces a risk: the firm may adopt strategic behaviour to increase the size of the subsidy. To determine the appropriate subsidy and conditions

governing its use, the government incurs substantial monitoring and information costs. An incentive is created to internalize those costs by bringing the firm into the public sector. On the benefit side, there are also incentives for public ownership. Public takeover of the firm permits a highly visible assertion of the government's commitment to a particular policy objective.

Although Canadair, the largest bailout in our study, is an important example of the public-ownership option, for the most part, contemporary Canadian bailouts have left the subject firms in the private sector. In the recent bailouts, there is a strong preference for the use of loan guarantees (or insurance). Several characteristics of loan guarantees may explain their popularity with politicians. Because loan guarantees are an off-budget item, they have low visibility and are sometimes a method of aiding the failing firm's credibility without any actual expenditure of public funds. Moreover, as an off-budget item the normal parliamentary processes for accountability are less likely to apply (Baldwin et al. 1983). On the other hand, the benefits of the guarantee are visible and focused on grateful recipients. Guarantees of loans obtained by the company do not necessarily directly involve politicians in the failing firm. They allow the government to help and, at least initially, to keep its distance from the ailing firm. In addition, a loan guarantee entails no special bureaucratic structures.

Loan guarantees are also attractive instruments because of their flexibility. Various conditions may be attached to the guarantees (e.g., employment levels, changes in product mix, capital restructuring). The guarantees can be made on a one-time only or repeat basis. The high visibility of the benefits, the obscured costs, limited political accountability and minimal structural requirements make loan guarantees an oft-deployed bailout instrument. In fact, it should be noted that these characteristics may lead to an underestimation of costs which lowers the threshold of decision and makes it 'too easy' to start a bailout. What may initially appear as a low cost, 'one time only', distant grant of assistance may start a process that is difficult to contain. Business people well understand that, according to the concept of sunk costs, one should look only to the future in allocating resources. Politicians are less able to walk away from their earlier decisions; once a grant of assistance has been made, refusing further grants creates political problems. The refusal may be publicly perceived as acknowledgement by government that the initial grant was a mistake. Moreover, having 'saved' the firm

once, terminating a stream of assistance may lead to a public perception that the government is responsible for the firm's subsequent failure.

CONCLUSIONS

The political case for bailouts links the policy-making process at the macro and micro levels. The way a political system deals with economic distress is shaped by the organizational and institutional arrangements that structure how interests are represented and accommodated. The more fragmented the structure of the state, the more policy-making is conducive to interventions that favour narrowly defined interests. Integrated institutional structures are more likely to internalize the costs and benefits of policy; such structures will opt for policies that produce net benefits rather than those that pass the costs on to other parts of the political system. The degree of fragmentation within business and labour groups shapes the extent to which these interests will seek policies that promote adjustment and increase national wealth. Encompassing interest groups will propose and evaluate policy from a broader perspective than more narrow organizations. Bailouts of failing firms are more likely to be sought and supplied in political systems with narrowly organized interests and decentralized governmental structures.

Our analysis of the incentives that operate at the micro level yields a more specific case for the political rationality of bailouts. Generally, it is the size and geographic location of the failing firm that determines the saliency of the demand for assistance. The political framework will bias policies towards those that retard adjustment; losses from such protectionism are thinly spread and largely invisible to the cost bearers while gains are concentrated, immediate, and highly visible to the beneficiaries.

NOTES

- 1 These characteristics include extent and distribution of foreign ownership, degree of industrial concentration, scope of public ownership, regional economic disparities, and structural composition.
- 2 MSERD was abolished by the Turner government in the summer of 1984. At this point it is not clear what agency, if any, is carrying out the integrative role assigned to MSERD.

8

Economic and political evaluation of bailouts

INTRODUCTION

The purpose of this chapter is to apply the theoretical economic and political perspectives outlined earlier (Chapters 3, 4 and 7), including some of the technical issues involved in measuring the costs and benefits of bailouts (Chapters 5 and 6), to the actual case studies (found in Volume II). The case-study material will be evaluated to ascertain the extent to which the decision to bail out can be justified on economic grounds. (The usual basis of this justification is that the private market's operation, without a bailout, would have led to socially undesirable outcomes.) This chapter also examines the political constraints on economically desirable policy outputs. Given the incentive structures that shape the behaviour of political actors, an attempt is made to explain bailout outcomes in particular policy contexts.

RECAPITULATION OF ECONOMIC-FAILURE ARGUMENTS

Previous chapters discussed the possible theoretical rationales, according to conventional economic theory, for government intervention in the form of bailouts. In a market-oriented economy, the economic rationales for bailouts depend on possible market failures in three main areas: the labour market, including its relationship to the larger community; the market concerned with the redeployment of assets; and the bankruptcy market, especially as it involves strategic behaviour in the insolvency bargain. These last two markets are often referred to under the general heading of the 'capital market'. This section deals in turn with labour-

market and community issues, and capital-market issues including the redeployment of assets and strategic behaviour in bankruptcy.

In each of these areas there is a litany of *possible* reasons why in theory the private market may fail to yield a socially desirable outcome. This suggests that government intervention in the form of a bailout may be justified. However, such a justification requires that the bailout, with all of its ramifications, yield an outcome that is socially more desirable than that yielded by the market with all of its ramifications, including those emanating from the possible sources of market failure. This difference between what is likely to be an imperfect market solution with no bailouts and an imperfect interventionist solution with bailouts is at the heart of the policy choice (e.g., Dahlman 1979; Wolf 1979).

Labour-market and community issues

In the minds of many the income loss of displaced workers and the associated adverse effects on the community are the most important consequences of bankruptcy. The prevention or amelioration of such consequences can be compared against the possible costs and other consequences.

In our previous discussion the income loss to workers who would be displaced if there were no bailout was seen largely as a transfer or pecuniary externality – the result of a market functioning, not failing, to reallocate resources to their highest valued long-run use. The amelioration of such losses or adjustment costs can be a legitimate social objective. However, this is largely a distributional issue and must therefore be regarded in the context of improving the income distribution and doing so in a fashion that is cost-effective and minimizes the distortions in the efficient allocation of resources.

The issue is complicated by the fact that *ex post* compensation by a bailout or any other instrument may involve double compensation to the extent that *ex ante* prices (in the case of the labour market, wages) reflected a premium for the risk associated with the potential for bankruptcy. As well, some of the income loss may be a loss of rents (especially if concession bargaining is less necessary if bailouts are anticipated) and while these may be very important for the individuals involved, their loss means an equivalent gain to others. Again, the income-loss calculations involve fundamental distributional issues.

In evaluating the larger community effects and the effects that such income losses would have on other transfers such as unemployment insurance or welfare, a fundamental question must be addressed. Are such consequences more severe if inefficient enterprises are bailed out? Or are they more severe if the market is allowed to run its course and the assets and workers are deployed elsewhere (presumably where they have a higher value-in-use, albeit with substantial transitional adjustment costs)? In the short-run the bailout is likely to ameliorate the adverse community and social effects; this may be part of its political appeal. However, in the long run, an economy that does not reallocate its resources to their highest-valued uses is likely to experience more social problems and severe strains on its communities, social services, transfer payments, and tax base.

In that vein, bailouts could be justified for social reasons if they eased the adjustment process and its transition costs, including government transfer payments, or perhaps if they postponed them to a time when they could better be absorbed by a recovered economy. 'Buying time' may enable the adjustment process to occur more gradually through such marginal adjustments as attrition and reduced entry, rather than through the 'lumpy' adjustments associated with bankruptcy (especially if it were generally unanticipated because of efforts by firms to hide their financial woes). Of course if bailouts become an expected response any gradual adjustment through attrition or reduced entry may be reduced.

The previous factors are largely distributional issues associated with pecuniary and transfer externalities. A potentially important real externality could occur if large numbers of displaced workers could not be redeployed without creating congestion externalities for other workers. This could occur for a number of reasons relevant to bailouts:

- when mass layoffs are involved in communities dominated by the firm;
- when workers are relatively homogeneous in their skills;
- when workers are likely to enter the pool of job seekers rather than leave the labour market;
- when the economy is in a recession and the existing pool of unemployed is substantial;
- when the surrounding area is also experiencing economic problems and cannot provide alternative job opportunities.

Such congestion externalities, to the extent that they exist as real externalities, will likely be more prominent when they cannot be internalized

by either wage adjustments or the entry of new firms. Layoffs that occur *en masse* rather than marginally can also enable firms to circumvent union-imposed seniority rules; however, such consequences presumably can be anticipated and internalized by the parties in their bargaining.

The bailout decision is further complicated by the fact that firms operate in markets that are distorted by taxes, tariffs, wage-fixing and regulatory constraints, most of which are government-imposed. While such constraints can certainly make it difficult for some firms to survive without bailout assistance, others do survive. Justifying bailout assistance as a 'second best' solution to counteract such constraints would therefore require a clear identification of a number of issues: that the specific constraints created the need for the bailout; that the constraint had a differential impact on the particular firm; that the constraints did not have a legitimate purpose to justify their adverse consequences; and that it would not be better or feasible to remove the constraint itself.

Capital markets and the redeployment of assets

One important basic fact that sometimes tends to be forgotten in the bailout debate is that the physical assets of a failing firm do not simply disappear if it is not bailed out. Those that have an alternative value-in-use will be redeployed, perhaps by the same company, as a restructured, more efficient organization or perhaps by other more efficient organizations. Those assets that have no alternative value-in-use should be regarded as sunk costs from the point of view of the efficient allocation of resources. From that perspective, a bailout means the continued use of assets where they have little value-in-use or in the least efficient firms. If the firm's problems were temporary (e.g., caused by unusual events or a number of investment mistakes that would not be repeated) this should be recognized by the capital markets and bridge financing provided.

A legitimate question arises. Is the necessary retrenchment and restructuring of a declining industry better carried out by marginal reductions of the least efficient aspect of each of many firms, or by the 'lumpy' exit of what are presumably the least efficient firms? While such lumpy adjustments can be socially more costly with respect to the redeployment of labour resources (being concentrated usually in one time and one place) it is difficult to second-guess the capital-market forces that would dictate the most efficient adjustment process.

When capital markets are functioning properly, companies will be liquidated only if they are worth more 'dead than alive'. Creditors will compare their resulting wealth positions under a liquidation (or going-concern sale) and a restructuring of their claims under a reorganization and choose the more advantageous alternative. Therefore, bankruptcies which lead to inappropriate liquidations will only occur when the market fails. These potential failures have been canvassed in Chapter 4 and were, by and large, found lacking from a theoretical perspective. Those arguments that have the potential to explain government intervention through a bailout are considered in this chapter.

Capital markets may be prevented from operating to redeploy assets efficiently when they are subject to other regulatory constraints or foreign-ownership requirements. In such circumstances, however, the capital markets are not failing but rather are behaving rationally subject to the externally imposed constraints. The relevant question then becomes: are the presumed benefits of the constraints worth the cost where capital-market inefficiency is an element of that cost?

Bankruptcy-market and strategic behaviour in the insolvency bargain

As mentioned previously, the bankruptcy market serves to redeploy assets to their most efficient uses. The threat of bankruptcy may also provide the necessary 'shock' for reorganization to avoid bankruptcy and it may provide the necessary pressure for suppliers, dealers, and employees to offer concessions and give up 'rents'.

There is a concern, however, that strategic behaviour in the insolvency bargain may result in premature liquidation if a particular secured creditor removes key assets from a failing firm. The secured creditor's decision to 'pull the plug' may be motivated by legitimate concerns about the debtor's viability and the protection of its security. On the other hand, the decision may be a tacit or explicit attempt to extort a bribe from the other creditors, whose claims would be worth more if the debtor's business were continued rather than liquidated. Strategic behaviour is not likely to result in allocative inefficiency unless two general conditions are satisfied:

1 there must be major creditors with quite different levels of exposure to default risk, at least one of whom has relatively little to lose from immediate liquidation; and

2 there must be a fairly large number of diverse creditors involved in the negotiations.

When these conditions exist, there is a risk that bargaining costs and free-rider problems may block a value-maximizing reorganization of an insolvent firm. Moreover, strategic behaviour may lead to wasteful delays in the bargaining, even if efficient allocation of the debtor's assets is ultimately chosen by the creditors. The efficiency rationale for government intervention depends on the assumption that it would be too costly *ex ante* for all creditors to agree on appropriate controls for strategic behaviour, and that the conclusion of a reorganization agreement after insolvency frequently requires the invocation of legal controls.

Assuming that there is potential for improving the efficiency of the bankruptcy market, subsidizing insolvent firms is probably not the best remedy for premature liquidations and protracted bargaining stalemates. The effectiveness of the bailout instrument depends on the ability of public officials to identify cases of strategic behaviour. Unreasonable or extortionate demands in insolvency negotiations are not usually easy to recognize, and may often be feigned if it is thought that they will attract a subsidy. The inherent difficulty and costliness of attempting to assess the reasonableness of the bargaining positions of opposing creditors suggests that a revision of the legal rules governing enforcement rights and voting procedures would offer a superior revision.

Unfortunately, bankruptcy-law reform in Canada has been under active consideration by the federal government for the past twelve years, and the government has not yet succeeded in bringing a bill to the House for a final vote. All the cases surveyed in this chapter occurred during the gestation period of these reforms, and it is therefore possible to explain the provision of subsidies to failing firms as a stop-gap policy designed to 'buy time' until more effective measures could be legislated. When the final version of the Mulroney government's proposals is made public, it should provide further evidence relevant to this hypothesis. The most recent version of the draft bill proposed that bankruptcy court judges be authorized to impose reorganization agreements on unwilling creditors when it is in the 'community interest' to do so. The existence of the government's proposal indicates some measure of public concern for the consequences of strategic behaviour in large-firm insolvencies. An analysis of the bailout cases suggests, however, that the factual basis for such concern is rather slender. On the other hand, the bailout cases were

not selected for the purpose of testing the strategic-behaviour hypothesis; only a few of the firms which received bailout assistance had more than one or two major secured creditors. While this indicates that the government rarely intervenes in response to threats of premature liquidation or bargaining stalemates, a fair test of the efficiency arguments in this study would require a much larger sample of all the largest insolvent firms which have recently been liquidated or reorganized.

RECAPITULATION OF THE POLITICAL-CHOICE ARGUMENTS

Political analysis of government intervention to maintain marginal firms is predicated on the pursuit of self-interest by political actors. Although institutional and organizational factors in Canada's political economy may bias the manner in which the political system responds to economic distress, these factors can only provide an explanation for the general complexion of policy. The absence of more inclusive political institutions and interest groups leads unavoidably to an emphasis on highly partial policy perspectives. In order to account for particular policy outcomes, or specific bailout decisions, it is necessary to turn to the policy implications yielded by the public-choice approach to micropolitical behaviour and then to focus on the incentive structures facing decision-makers.

The public-choice framework depicted in Chapter 7 stands in sharp contrast to the conventional economic approach. The political model assumes decision-makers are motivated by efforts to build electoral support, rather than by a desire to correct market imperfections and thus increase economic efficiency. Bailouts are explained by their political expedience. Politicians' basic strategy for enhancing their prospects of staying in power is to provide visible benefits to concentrated groups of marginal voters and to disperse, obscure, or justify symbolically the policy costs, preferably inflicting them on nonmarginal voters. The political model predicts that decisions to rescue come largely from the perceived existence of a salient political constituency seeking protection. Policies in response to these political imperatives are primarily subsidies that seek to maintain jobs in the short run; they usually tend to inhibit rather than facilitate the very restructuring and downsizing of the industry that may hold some prospect for long-run economic viability.

The policy implications of the political framework show under what conditions there are incentives for politicians to assist parts of the

economy to defy the forces of adjustment using subsidies to marginal firms. From the political perspective each bailout is viewed as a wealth transfer that generates net political benefits for decision-makers. The size and location of the firm, as well as the perceived link between the firm and the government's central policy objectives, are the attributes specific to each rescue. Alone or in combination these attributes create political *ad hoc* interventions' constituencies that cannot be ignored.

APPLICATIONS TO CASE STUDIES

There can be a considerable gap between theoretical arguments justifying possible bailout assistance and the practical application of these arguments to specific bailout requests. Clearly a number of the economic arguments pertaining to market failure have more relevance to the bailout decision than do others. The key issue for policy makers is to ascertain which if any of the general arguments pertaining to market failure and market imperfections apply to bailouts generally and which to specific bailout cases in particular. The political case for intervention turns on the political expedience of subsidizing marginal firms. For any bailout it is necessary to identify the principal political costs and benefits facing decision-makers.

The next section applies some of the theoretical arguments to specific case studies involving bailout decisions (see Table 25 for the cases). The purpose is two-fold: to illustrate the potential practical applicability of the previous theoretical arguments and to evaluate the case studies to see if the bailouts either can be justified on economic grounds (possible market failures and imperfections) or explained on political grounds (political expedience). The intent is not to provide a checklist stating whether each particular bailout decision was correct or incorrect on these grounds; rather, the intent is to utilize the case studies to illustrate the theoretical principles previously discussed.

The general format will be to provide a brief synopsis of each case study (from the larger survey of cases in Volume II) dealing with the issue of possible market failures and political salience. In most cases this involves a brief description of the circumstances leading to the financial problems, the history of earlier government involvement, the stated rationale for intervention, the details of the bailout and the final outcome. Once this setting is provided, each case is reviewed with respect to the appropriate response to possible failures in the labour, capital, and

TABLE 25

Electoral outcomes in bailout ridings (winning party and size of victory^a) for federal, Ontario, and British Columbia elections

Firm	Federal riding	Oct. 1972	July 1974	May 1979	Feb. 1980
Maislin	Lasalle (Ont)	L.23,164	L.19,522	L.31,891	L.27,388
Canadair	Dollard (Que)	L.29,473	L.27,109	L.37,086	L.37,093
Electrohome	Kitchener (Ont)	L.247	L.7,116	PC.11,885	L.1,512
Massey and White Farm	Brant (Ont)	NDP.5,272	NDP.2,043	NDP.5,486	NDP.4,580
Consolidated Computer	Ottawa-Carleton (Ont)	L.9,000	L.10,938	L.6,945	L.12,616
Chrysler	Windsor-Walkerville (Ont)	L.2,634	L.5,186	L.1,817	L.6,409
Chrysler	Windsor-West (Ont)	L.4,856	L.8,844	L.5,037	L.9,970
Chrysler	Essex-Windsor (Ont)	L.3,296	L.8,721	L.1,770	L.8,148
CCM	York-South Weston (Ont)	NDP.4,674	L.1,855	L.3,677	L.7,240
CCM	St. Jean (Que)	L.7,155	L.9,109	L.24,446	L.24,940
Coop Implements	St. Boniface (Man)	PC.4,773	PC.7,847	L.2,765	L.7,032

TABLE 25 (cont'd)

Firm	Ontario riding	Oct. 1971	Sept. 1975	June 1977	Mar. 1981
Minaki	Kenora (Ont)	PC.6,331	PC.4,060	PC.5,626	PC.6,248
Clarke Irwin	Bellwoods (Ont)	PC.6,631	NDP.394	NDP.2,845	NDP.365

Firm	BC riding	Aug. 1972	Dec. 1975	May 1979	May 1983
Whistler	West Vancouver-Howe Sound (BC)	L.520	SC.11,128	SC.10,793	SC.10,452

L - Liberal; PC - Progressive Conservative; NDP - New Democratic Party; SC - Social Credit

a Number of votes ahead of second-place opponent

SOURCE: *Canadian Parliamentary Guide*, 1982-1983.

bankruptcy markets. Finally, the political case for each bailout is reviewed with respect to the factors that render politicians willing to provide *ad hoc* assistance to narrowly defined interests.

Chrysler Canada

Chrysler's financial crises in the late 1970s stemmed from general problems associated with the auto industry: competition from imported automobiles, rising energy prices and the recession. There was widespread agreement that the North American automobile industry required some form of restructuring to meet these problems. Chrysler (both US and Canada) was particularly hard hit by some of these problems because it had generally produced large, energy-inefficient automobiles and the costs of retooling to meet new energy regulations had to be amortized over a smaller volume of car production than GM or Ford.

The severity of Chrysler's financial problems are highlighted in the ratio analysis presented in the case. The company's liquidity

deteriorated from 1977; even after the 'turnaround', liquidity remains a concern. The use of debt and the associated interest charges became a serious problem in 1978. The coverage ratios at that date became negative and remained negative until 1981. Similarly the debt ratio was a low value in 1977 and quickly became larger. This dramatic increase reflected not only the increase in debt over time but the reduction in book equity due to a series of losses beginning in 1978. The combination of poor profitability, inadequate coverages and a high debt ratio resulted in a prediction of bankruptcy for Chrysler for the years 1979, 1980, 1981, and marginally in 1982.

These problems led to a request for financial assistance which was provided in 1980 in the form of federal loan guarantees and a grant from Ontario to assist in building a research centre. Although the loan guarantees have been restructured and the conditions changed, in part in response to Chrysler's ignoring the earlier conditions, neither the loan guarantees nor the grant have been utilized. Chrysler has often been cited as an example of a successful bailout because the company is now in a reasonable financial condition (its share price has increased seven-fold since the loan guarantee), wage and employment levels have been restored, and the loan guarantees and grant have not been activated. The extent to which this turnaround would have been accomplished using private capital markets remains an open question.

Labour-market failure

Clearly, concern over jobs was a reason given for government support since Chrysler employed over 10,000 workers, mostly in the already depressed Windsor labour market, with approximately similar numbers employed in both Chrysler parts suppliers and dealers. Like Brantford with Massey and White Farm Implements, Windsor is a one-industry town that is extremely dependent upon the auto industry. Indeed the whole of southeastern Ontario was widely perceived to be running the risk of decline associated with possible deindustrialization. In essence, similar alternative job opportunities were not available to workers given their industry-specific skills; the majority of those who went West to find jobs in the booming energy sectors returned because their particular skills were not required.

In terms of specific labour-market failures to deal with such adjustment problems, two areas justifying assistance seem most relevant to

Chrysler (as with Massey and White Farm Equipment in Brantford): to reduce the adjustment costs and associated transfer payments or at least postpone them to a time when they can better be absorbed by the economy; and to minimize congestion externalities associated with mass layoffs in a one-industry town.

If there is any validity to the possibility of congestion externalities associated with such mass layoffs it would clearly apply to the Windsor labour market at the time of the Chrysler bailout request. Unemployment was already high because of the recession and the decline of the auto industry, and the surrounding southeastern Ontario region was experiencing economic problems. The workers were fairly homogeneous in terms of their skills and most likely would have entered the already large pool of unemployed job seekers rather than leave the labour force for viable alternatives such as retirement, household work or school. Even if the layoffs would not have created *real* externalities (in the form of adversely affecting others and for which market prices could not internalize the externalities), the *pecuniary* externalities in the form of transitional adjustment costs to workers would have been substantial. They would have been displaced to their next-best-alternative activities of which there were few.

In this context a bailout may be rationalized even if it simply 'bought time' for the market to adjust through such mechanisms as attrition and reduced entry rather than exit and mass layoffs. Even if the bankruptcy and rationalization of the industry is simply postponed, it could occur at a time when the economy has recovered somewhat and can better absorb the displaced workers with a minimum of transitional adjustment costs. This in turn can save on the otherwise substantial transfer payments in terms of unemployment insurance, welfare and social services that in the absence of a bailout would have had to be increased.

In the Chrysler case a bankruptcy and liquidation at the time of the bailout would have been particularly disruptive. It was not anticipated by most parties; in a sense Chrysler was so important that people felt it could not go bankrupt. This inability to anticipate bankruptcy and thus make appropriate adjustments is a general problem associated with bankruptcy as a form of asset redeployment. Firms generally will not want such information known because of its adverse effect both on potential customers concerned with warranties and servicing and employees concerned with job security. If the firm is successful in hiding the problems the parties may be unable to anticipate impending problems

and plan for them through marginal adjustments. Bailouts will often make that information more publicly available and hence facilitate adjustment; however, once bailouts are anticipated they may also preclude marginal adjustment. Whether the existence of bailouts as a policy instrument mitigates or exacerbates the marginal adjustments that are socially less disruptive than the 'lumpy' adjustments associated with bankruptcy remains an empirical unknown.

Critics of the Chrysler bailout might argue (and it is important to think of these criticisms *ex ante* since *ex post* we obviously have more information) that the bailout simply prevented the ultimate re-employment of the Chrysler workers in areas where the services were more valued, perhaps in a reorganized Chrysler, perhaps in the other auto manufacturers that would pick up some of the slack, and perhaps in other activities where they will ultimately have to be re-employed given the changing nature of the auto industry. The anticipation of a bailout – in fact, its apparent certainty in some circles – may have prevented the marginal adjustments through attrition, early retirement, reduced entry, and work sharing that would have involved the least social costs. Even if the bailout simply 'bought time' until the recovery, once a recovery was in place Chrysler would likely be profitable at least in the short run and hence the needed rationalization of the industry would never occur. Also, if workers experience a substantial loss in their income because their human-capital skills are industry-specific, this loss should be regarded as a 'sunk cost' irrelevant for the efficient utilization of resources. Bailing out their employment in that sector simply encourages their continued use in a sector where their output is not valued; it discourages concession bargaining and enables such workers to continue to extract rents defined as payment in excess of their next-best alternative. In fact the consequences of job loss appeared not to be very severe for Chrysler workers. They would not agree to concession bargaining nor to avoid a strike for a wage settlement that would set the pattern for the whole industry.

Even though the Chrysler bailout has been an apparent success there is no way of knowing how much of this, if any, can be attributed to the government guarantees. Since the firm was in the process of internal reorganization, altering its product mix, and engaging in cost cutting, the turnaround may have occurred in any case. The success was also assisted by an upturn in the economy and a reduction in Japanese competition through 'voluntary export restrictions'. The end result

without a bailout, may have been an even more efficiently restructured organization with greater cost cutting from concessions from suppliers, dealers, workers, and even lenders who wanted to avoid costly bankruptcy. It is unlikely that the validity of these criticisms will ever to be known. Suffice it to say that they are certainly muted by Chrysler's apparent turnabout.

Capital-market failure

With respect to possible failures of the capital market, the redeployment of Chrysler's assets certainly would have involved mammoth adjustments in the event of a receivership leading to a liquidation or going-concern sale. Nevertheless those assets with a value-in-use would have been redeployed by other auto manufacturers or in other uses and those with no value-in-use should be regarded as sunk costs. Of course, it is also not obvious that a liquidation would have been the result of a capital-market solution. The costs of liquidation imposed on lenders likely would have been very large; the firm's long-run profitability, albeit in a company with a changed view of the market, suggests that a voluntary solution would have been the logical result.

In the Chrysler case, the issue certainly arises as to whether retrenchment in an industry is better achieved by marginal reductions in all firms or by 'lumpy' reduction through the exodus of what are presumably the least efficient firms. As previously discussed with labour the social consequences probably would be smaller with marginal cutbacks shared by all. However, with respect to capital, there is little reason to believe the market would dictate the appropriate response and divest whatever is least efficient whether it be a total organization or the least efficient segments of a number of organizations. Sufficiently large economies of scale in the auto industry may well dictate that the most efficient retrenchment would be through the exit of one firm and the redeployment of their useful assets by the others.

This raises another problem because an adjustment process involving the exodus of Chrysler may well leave the industry with a socially unacceptable degree of monopoly power in the hands of GM and Ford. This may be an unlikely event given foreign competition, but such competition itself is highly regulated, even if the form of the regulation is 'voluntary export restraints'.

Further, capital markets may not have been allowed to function efficiently if the redeployment of Chrysler's assets in the event of bankruptcy had involved, for example, Japanese co-ownership seeking domestic ownership as a way around protective barriers. In such circumstances the capital markets are not really failing; they are responding to binding political constraints. That such political constraints can be important is also evidenced by Herb Gray's support for the bailout being based in part on the fact that with the bailout, Canada's 'deficit' in trade under the Auto Pact could be put in better balance by attaching conditions such as more research and development, corporate decision-making, purchasing, and part sourcing in Canada.

With respect to possible failures in the bankruptcy market emanating from strategic behaviour on the part of creditors, it is the case that Chrysler Canada's financial dependency on Chrysler US complicated the insolvency negotiations. If Chrysler US had been petitioned into bankruptcy, similar proceedings would have been required in Canada to liquidate the assets of Chrysler Canada. Moreover, the Canadian banks that had loaned funds to Chrysler Canada had the right to call their loans in the event of the parent firm's bankruptcy. In the Chrysler negotiations, the Canadian banks had a much better security position than the American creditors. The bargaining stalemated over a four-month period during which the Canadians held out for preferential treatment in the workout agreement. The Canadian banks finally succeeded in extracting two substantial concessions from the US creditors – an arrangement that increased the Canadian subsidiary's cash-flow position (which increased the value of the Canadians' security), and special rights to trigger a default under the reorganization agreement. Conversely, those suppliers who had a dependency relationship with Chrysler seemed willing to extend credit if necessary and it is unlikely that any individual could have precipitated bankruptcy; in such a depressed market even sales on uncertain credit may be valued. In addition, when the loan guarantees were arranged, co-operation with creditors was attained; there is little reason to think that such co-operation could not be obtained in a private reorganization.

The real strategic behaviour seemed to occur in the bailout and not the bankruptcy bargain. Since Chrysler Canada's existence depended upon the parent's financial health, the Canadian government could strategically wait for the US bailout and reap the spillover benefits. The US government, anticipating this problem, waited for Canada's decision

before making their own. Although this may have been a 'bluff' by the United States, Canada had to make a decision in order to prevent a retrenchment by Chrysler as part of the US bailout bargain that would transfer production from Canada to the United States. Additional strategic behaviour was observed in Chrysler's repeated disregard of the conditions of the guarantee, presumably with the knowledge that little would be done as long as they appeared to be turning the company around.

Political rationale

The 10,000 workers at Chrysler as well as the tens of thousands of jobs with dealers, suppliers, and in the Windsor community constituted an intense political constituency for assistance. Although the three Windsor ridings had consistently supported the Liberals, the large personal costs resulting from nonintervention made it unrealistic to treat the voters, regardless of their electoral histories, as anything but marginal. What makes this situation unique is not that the potential costs of firm failure were perceived to have an influence on the riding's electoral behaviour, but that unlike other districts that are highly dependent on a single, failing firm or declining industry, Windsor had three Cabinet members (Gray, MacGuigan, and Whelan) to press the case for aiding Chrysler. The support for assistance to Chrysler was not coming only from those with political clout in Cabinet. The US Treasury Secretary indicated that the American decision was contingent in part on Canadian participation in the rescue. Although this may have been a bluff, it no doubt put additional pressure on Cabinet.

Three Cabinet ministers, including the Minister of Industry, Trade, and Commerce (the Honourable Herb Gray), arguing on behalf of a large workforce to be disadvantaged by Chrysler's failure, left little doubt that bankruptcy was not an acceptable political action. The live issue was the choice of bailout instrument. Comparison of the Canadian rescue instrument with the terms of the US rescue illustrates some fundamental differences in the two decisions and provides an interesting picture of the political interests at play.

In the United States the decision to rescue Chrysler was more problematic than in Canada. The American decision-makers' response to the demands for assistance was highly constrained by a strong political ideology against such interventions (McKay 1983; Edmonds 1983). In

Canada, the government was more hospitable to these interventions. The long history of state intervention made it easier for Canadian politicians to contemplate what was essentially a transfer from the taxpayers to Chrysler.

Against such a strong ideological bias in the United States the political mobilization of those who stood to bear the costs of Chrysler's failure was not enough to provoke political action (Freeman and Mendelowitz 1983). It was only after the plight of the workers and dependent communities was coupled with a campaign to portray the negative effects of Chrysler's failure on the country's international image that the decision to assist was taken. The US aid package was clearly tied to rationalization and restructuring. The bailout was specifically linked to facilitating, rather than defying, the forces of adjustment. The Chrysler Loan Board was established to monitor the restructuring and rationalization. There were no employment conditions in the US bailout agreement; indeed Chrysler continued to lay off workers (although the bulk of the layoffs occurred before the bailout). A major condition of the US rescue was that the government loan guarantees be matched by credit concessions from the banks, the dealers, the workers, the suppliers, and the state governments. The loan guarantees were not to be a simple transfer from the American taxpayers to Chrysler. In approving the guarantees, the Loan Board insisted not only on credit concessions but also on evidence of significant adaptive restructuring within Chrysler.

The Canadian rescue package also took the politically favoured form of loan guarantees. However, unlike the US aid, the Canadian loans were not contingent on credit concessions, nor on restructuring. No new agency was set up to monitor Chrysler Canada's adjustment. The Canadian assistance was tied to maintaining investment and employment levels in Canada. Much of the political debate, which was between the Ontario and federal governments, focused a demand by Ontario (and the New Democratic Party and the UAW) for specific job-maintenance guarantees as a condition for any assistance.

Unlike the US rescue, which was a marked deviation from American practice, the Canadian bailout followed a familiar pattern. The primary focus of the politically salient constituency and of the decision-makers was job preservation. The terms of the assistance reflect Canada's fear that in the overall adaptation of Chrysler, the Canadian segment would shrink. This concern led to the conditions in the loan agreement. Notably there was no insistence that there be worker concessions.

Indeed, demanding higher wages and increased benefits the Canadian UAW went on strike for five weeks in November 1982. Although both the US and Canadian bailouts were in response to large groups of voters threatened by economic change, there are important differences in the policy outcomes. The US politicians were less able to pass off all the costs to taxpayers. It was necessary for those who would be adversely affected by Chrysler's failure to visibly share the costs of the rescue. Moreover the preponderant objective of the US rescue was the long-run economic viability of Chrysler. In Canada the costs of the rescue were to be borne by the taxpayers. After attempting to head off any adverse effects in Canada due to Chrysler US's restructuring, the Canadian bailout of Chrysler was essentially a narrow welfare response. It was an effort to ease the pain of adjustment by preventing the dislocation of those who would have suffered by the company's contraction. In short, the political-influence function turned on narrow interests in the pursuit of political entitlements; the Canadian government responded to those interests while keeping the costs as invisible and dispersed as possible.

Massey Ferguson

As part of the volatile farm-equipment manufacturing industry Massey Ferguson had experienced earlier severe financial crises in the 1920s, 1930s and 1950s. The recent crises of the late 1970s, in addition to reflecting the generally depressed condition of the industry, also found Massey in particularly dire straits due to its unusually high debt-to-equity ratio, operating costs and number of employees per unit of sales relative to the rest of the industry. These problems led to a renegotiation of debt covenants in an attempt to control future debt issues. The problems also led to a management reorganization and a complicated multinational bailout arrangement in 1981 with a second restructuring arranged in 1983.

Labour-market failure

The labour-market consequences of a bankruptcy were clearly a major issue in the bailout decision. Approximately 6,000 Canadian workers were directly involved, mostly in Brantford, Ontario – a community already hit by high unemployment, much of it associated with the 1980 layoff of 1,000 workers by White Farm Equipment. To the extent that there is any validity to the argument that the labour market may fail to

take account of the congestion-externality costs imposed by mass layoffs in relatively small communities, this argument applies to the Massey Ferguson case in Brantford. The problem is compounded by the fact that the workers are relatively homogeneous in their skills and they would likely enter the already large pool of unemployed rather than voluntarily leave the labour force for viable alternatives like retirement, household work or education. The congestion-externality argument has less validity in the larger Toronto labour market where 1,848 Massey Ferguson workers were laid off in 1980 and 1,200 more were to be laid off on the closing of the Toronto facilities.

Even if there were no formal market failures attributable to congestion 'externalities' (i.e., costs imposed on other workers and for which market mechanisms do not exist to internalize the costs), the labour-adjustment costs of a Massey bankruptcy would be substantial. Such costs were already being experienced throughout Massey's worldwide workforce (down from 68,000 employees in 1976 to 29,749 in 1982). Layoffs were a regular feature for their Ontario workforce in the Brantford and Ontario operations. Nevertheless, a bankruptcy would mean permanent layoffs from Massey and little opportunity for absorption elsewhere especially for the Brantford workers. The Brantford community was fairly small (almost a one-industry town) with exceptionally high levels of unemployment (25 per cent in manufacturing in 1981); the nearby communities of Kitchener-Waterloo and Hamilton were experiencing their own severe problems especially in manufacturing; the overall economy was in severe recession; the whole of southeastern Ontario was under unusual economic strain.

In this regard the bailout may be rationalized as a way of reducing the adjustment costs even if it simply postponed the inevitable decline. Workers were given more time to adjust and anticipate the inevitable changes; the economy was given time to recover and be better able to absorb the displaced workers, either through their outward mobility or through the entry of new firms into the community in response to the available pool of relatively skilled workers. In addition, the costs of bailout assistance must be viewed relative to the costs of inevitable, alternative forms of assistance (i.e., transfers such as unemployment insurance and welfare and increased strains on social services).

Opponents of the bailout could argue that such assistance simply exacerbates the ultimate adjustment that inevitably will have to occur because the industry needs to be rationalized. In fact, it discourages

adjustment in the presumably inefficient and high-cost firms in the sector because they are the ones that will receive the bailout. What is needed is not bailouts that encourage retention of resources in the declining industries and in the most inefficient firms in those industries, but rather adjustment assistance to facilitate redeployment of resources in the expanding sectors.

Critics of a bailout could also argue that in this particular case the consequences of a job loss were not sufficiently strong to induce the UAW to accept concession bargaining to avoid a strike in 1983. In addition the social consequences, in the form of stress, family problems, suicides, and anti-social behaviour can ultimately be exacerbated in a situation that is artificially sustained for the short run and restructuring retarded. If the social costs that emanate from the mass layoffs associated with plant closings are particularly severe, an appropriate policy response might be to raise the cost of such layoffs, for example, through severance pay or additional termination notice. Bailouts are a particularly poor instrument because they reward rather than penalize the inefficiency and thus can have other long-run implications exposing workers to even more risky ventures on the part of firms.

Even with respect to the consequences of mass layoffs in one-industry towns like Brantford, the available pool of skilled labour and the existence of a social infrastructure for industry should serve as an incentive to attract additional industry. The new industry may be lower-paying and even nonunion and it may enter only if tax or other concessions are involved for the use of the public infrastructure; however, presumably that would be the competitive price indicating the value of the alternative uses of the resources.

Capital-market failure

The reluctance of capital markets to continue the support for Massey presumably reflects their evaluation of the long-run potential of the farm-machinery market and Massey's position in that market (i.e., the market is in long-run decline and/or Massey's inefficiencies and high costs made them particularly vulnerable). Certainly the private capital markets had earlier assisted Massey (e.g., the CIBC loan extension during the 1930s), presumably when their financial problems were seen as temporary.

Also, Massey had access to the financial resources of Argus Corporation based on its relationship with the holding company. In fact, Argus discontinued its involvement, giving away its shares to the company pension fund in return for a possible tax write-off. This action also indicates the contortions that an expected bailout will encourage, with Argus divesting itself completely knowing that a bailout would be unlikely given their involvement and access to financial resources. It is possible that if bailout aid had been refused Argus Corporation would have continued its involvement and perhaps even turned the company around. It appears that the capital markets were behaving quite rationally, albeit that they attach no intrinsic value to a Canadian-based farm-equipment manufacturer, or the effect of its exports on the balance of payments, or the historic value of Canadian entrepreneurship in developing Massey into such a large multinational enterprise.

With respect to the redeployment of assets it must also be remembered that the bankruptcy of Massey would not mean that the equivalent of its assets (and associated employment) will disappear. They would be redeployed (e.g., by a reorganized and probably scaled-down structure, by other firms presumably that are more efficient in their use, and by parts manufacturers for the market in Massey's parts and servicing), and where they could not be redeployed they should be regarded as sunk costs with no alternative value-in-use. It is true that the bankruptcy of Massey may have resulted in the sale of their assets at a time when the market was already glutted; however, this means lower prices (a pecuniary externality) for purchasers who were also suffering economically. The assets would be sold at a price equal to their value-in-use in their next-best-alternative activity.

The resulting bailout resembled the revised structure that would result in a private-market transaction where all existing financial claimants have their claims reduced and there is a substitution for debt claims by preferred or common equity. Just as in a private-market reorganization, the end result was a lengthened term to maturity for existing debt, lowered interest payments, substitution of equity for debt claims, and new equity financing. In this last respect, the government assistance was significant. Both the federal and Ontario governments provided a guarantee on a preferred equity share issue. In addition the CIBC purchased \$50 million of new convertible preferred shares for cash. Finally, the existing equity holders' claim was also reduced by the issue

of a substantial number of common equity shares to the banks as compensation for forgiving interest payments.

Was the guarantee on the preferred shares necessary in the refinancing scheme? It is very difficult to make a categorical statement. However, with the very questionable future of the industry and Massey within it, it is unlikely that the new funds would have been forthcoming at anything but a prohibitive yield. As it was, even with the guarantee, the issue sold slowly.

With respect to possible strategic behaviour in the insolvency market itself, it is true that Massey's debtors were numerous and internationally dispersed. The debtors had their own different political pressures all of which could increase the transactions costs of refinancing or reorganizing. In addition, very different exposure levels were involved. The CIBC was particularly exposed with its unfavourable security (mainly the Brantford plant), British banks had more favourable security (Perkins Diesel assets), and American banks were more diversified with no large debt exposure for any one bank. In spite of the large number of actors, each with different exposure levels and substantial power to start the organization down the road to bankruptcy, the banks had a strong desire to avoid bankruptcy in part because of the substantial transaction costs and delays (legal proceedings could have lasted five to ten years). Large numbers of creditors with different exposure levels and the power to instigate bankruptcy could have resulted in the 'plug being pulled too early', but because these same conditions mean substantial transaction costs, bankruptcy may be delayed.

In addition, the fact that the multiplicity of creditors were able to agree to a bailout arrangement where they all shared the losses to some extent suggests that they should have been able to agree to a private financial restructuring to prevent a premature bankruptcy. Obviously, the parties must all 'take a bath' in the financial restructuring, be it a bailout or private restructuring, and hence presumably side payments are involved to secure the support of those who have the least to lose in either case. If this proves to be easier under a bailout arrangement, public money may be being used more than private money would have been under private restructuring, in which case the distributional consequences of such action must be considered.

There are a number of interesting issues in this particular case. First, the government guarantee on preferred shares was invoked in July 1982 and the governments became preferred shareholders thereby exposing

themselves to a potential conflict of interest in any subsequent government intervention. Secondly, subsequent to the default on the preferred shares, the company attempted a second restructuring, again substituting common equity for: reductions in interest payments by certain banks, conversion of debt, the payment of cash dividends on outstanding preferred shares, and certain classes of outstanding preferred shares. The government is not involved in this restructuring. Thirdly, it has been suggested that the government intervention was not only to protect jobs but also to bail out the CIBC which was a major lender to the firm. It is very difficult to obtain any evidence for this allegation. Financial analysts attributed the low price-earnings multiple on CIBC common equity in part to the uncertainty concerning the viability of Massey and the CIBC loans to it, and in part to other problematic credit extensions to troubled companies. Based on the 1979 CIBC earnings per share, analysts felt that a Massey writedown would reduce earnings per share by 14 to 25 per cent. Since it was unlikely that a large scale liquidation would have occurred without a bailout, any losses to the CIBC would reflect the reduction in value of their existing claims under the bailout. To whatever extent that their value is greater under a bailout than under a voluntary reorganization, the banks are better off. However, this is impossible to measure. The rates of conversion of dollars of forgiven interest payments for common equity and the substitution of convertible preferred shares for CIBC outstanding loans are negotiated between lenders and the company and not with the government.

Economic and political rationale

The case of Massey Ferguson involves a number of complex issues related to economic rationales for a bailout: possible failures in the labour, capital, or bankruptcy market. Probably the most convincing rationale hinges on avoiding, or more realistically, postponing the labour-adjustment costs and associated public transfer payments to a time when they could better be absorbed by a recovering economy. Such a bailout could have an economic rationale if it would mitigate rather than exacerbate such adjustment costs. This effect is an empirical unknown, in part because of the long-run consequences of bailouts as they become anticipated by the parties. The other rationales for a bailout in this particular case do not appear convincing, at least from the perspective of an economic rationale based on market failures.

The massive labour-adjustment costs associated with Massey's failure were at the centre of the political case for the bailout. The Massey workers, and those in related employment or the community who stood to be negatively affected, forged a significant political constituency. The federal riding has been held by the NDP since 1971 in a series of closely contested elections (see Table 25 above). Provincially the riding was held by the NDP until just before the bailout in 1981. In a by-election the Tories won the seat. At the time of the crisis all of the federal or provincial parties supported the rescue. Much of the political debate focused on the form of the assistance and which interests stood to gain.

The pressure to rescue Massey was based on more than the objective of job preservation. It was believed that a bankruptcy at Massey would have negative consequences for parts of Canada's financial system. The banks, in exercising discretion over financial flows, have a role in shaping policy outcomes. The importance of maintaining the banks' co-operation in lending policies that reflect government policy objectives as well as market criteria emerges in several bailout cases like Dome and Atlantic fisheries. If the banks are to continue to play an instrumental role, they cannot be left to bear the costs of lending practices which reflect their policy role. If the banks cannot rely on the government to help, they may become more risk-averse in all of their lending decisions. Thus in cases like Massey where there is heavy exposure for one or more members of the banking system the government may need to take these losses into account. The somewhat ironic result is that, although the banks' more lenient lending practices may at times augment the government's policy choices, the subsequent exposure of the banks may also narrow the government's options by increasing the pressure to rescue a failing firm.

The functional characteristics of the bailout instrument can provide a picture of the array of the salient political forces in the Massey rescue. Even prior to the bailout agreement, Ottawa moved to mitigate labour dislocations. Unemployment-insurance benefits were extended from twenty-six to fifty-two weeks. Later, under the Industrial and Labour Adjustment Programme (ILAP), direct aid was given to the city of Brantford by providing interest-free loans to cover half of capital-cost expenditures for businesses moving to the locality. The equity guarantees of the rescue were in the main a transfer from Canadian taxpayers to Massey's Canadian workers. In return for government assistance, Massey promised *inter alia* to maintain (or expand) produc-

tion in Canada and not to reduce the Canadian labour force below 6,000 except for temporary layoffs. The funds were to provide a way of maintaining employment during an otherwise painful downturn in the industry. The bailout did not provide for restructuring nor did it mandate adjustment. It extracted the promise that labour would not immediately bear the brunt of Massey's hard times.

Except insofar as the exposed banks were also better off if the company survived, the evidence supports the notion that Massey's rescue was tied directly to jobs and votes. However, there were important symbolic justifications for the assistance. Massey was a potent symbol of Canadian manufacturing in the international arena; it made one of the few major manufacturing contributions to our balance of payments which is dominated by primary-resource exports. Although broad symbols were used to justify the costs of Massey's rescue, there was no effort by government to consider Massey's plight in a broader perspective. Despite the impending failure of three farm-equipment companies (White Farm, Massey, and Cooperative Implements), the policy makers did not attempt to deal with the real adjustment problems facing the sector. In assessing the firm's financial difficulties there was no serious consideration of sectoral solutions that might imply rationalization, restructuring or shedding of labour. There was no constituency espousing an encompassing approach and no political actors who would immediately benefit from deploying one. The political incentives operating in Massey, as in the other two farm-equipment cases, were to provide specific subsidies to preserve pockets of employment. There was no political support for rationalization of the sector which might have implied further shrinkage of the individual firms. As in the case of Chrysler Canada, the demands were for assistance to narrowly defined interests, and the suppliers of the decision had no incentive to take a broader view. The requests for assistance rather than adjustment by a mobilized political constituency were buttressed by the banks whose interest was to limit their exposure.

The instrument of the rescue, equity loan guarantees, provided visible benefits to a large and intense group of voters. The costs of the assistance were dispersed and, in the case of the federal government, not even subject to parliamentary approval. The cost bearers were assured that a major Canadian presence would not disappear from the international stage and that an oft-cited symbol of Canadian home-grown entrepreneurial success would be saved.

Canadair

In 1976 Canadair was bailed out when public ownership replaced a history of public assistance dating back to 1947. Stated rationales included preserving the ability to produce aircraft, encouraging aerospace exports, saving jobs and maintaining the market for high-technology component manufacturing. Public ownership led to expansion into the production of the Challenger executive jet with loans from the CIBC and the Provincial Bank of Canada. High interest and wage costs, coupled with the recession and manufacturing delays, led to substantial government spending on Canadair. By 30 June 1979, this involvement included equity, loans, and loan guarantees of \$471 million—\$408 million greater than the firm's estimated liquidation value. In addition, from 1976 to 1982 more than \$1 billion was advanced to Canadair through letters of comfort signed by successive ministers of ITC. Because of its continuing financial crises, in November 1982 Canadair was transferred to the Canada Development Investment Corporation (CDIC) where it would be subject to greater monitoring and control. This action was accompanied by a further request for \$240 million of equity capital from Parliament, justified in part on the grounds that termination costs (e.g., severance pay and payment to suppliers) would otherwise exceed that amount.

The earlier bailout and the continued public support had been justified in part for employment reasons. There are a number of reasons to question this rationale, especially as it would hinge upon labour-market failures. Employment was concentrated in Cartierville, Quebec, part of the large, albeit depressed, Montreal labour market which because of its size had some potential to absorb displaced workers. If they could not be absorbed because of the high unemployment, sustaining their specific jobs through a bailout would mean presumably that the decline in demand in the industry would have to be absorbed somewhat by other firms and their employees. The aerospace industry is constantly in a state of flux and relatively well paid in part to compensate for the employment uncertainty. In fact, prior to the bailout and the subsequent expansion, Canadair's workforce was down to a level of 1,800 in 1975 reaching 6,170 in 1981 *after* what could be considered the government-supported artificial expansion associated with the Challenger program. In fact, Canadair had to rely on imported employees for its skilled-labour needs, even going so far as to open a recruiting office in London, England in 1982.

Even if the employment objectives were legitimate, the magnitude of the costs of attaining this objective were highlighted in a *Fifth Estate* television account. The program calculated that it would have been cheaper to give every member of the Challenger workforce \$60,000 per year for life and that Ottawa's \$1.5 billion involvement in Canadair by mid-1982 was greater than monies spent by Ottawa on all of its job-creation and retraining programs in that year.

With respect to capital-market failures it appears that the unwillingness of the capital markets to invest in such projects reflects a rational response to their perceived risk and uncertainty. If governments want such investment to persist for noneconomic reasons (e.g., to maintain a presence in the high-technology aerospace industry, to encourage exports, or to offset alleged subsidies in other countries) then it will clearly have to subsidize the capital markets. This case study suggests that such objectives can be very costly and can involve overexpansion and a neverending cycle of 'throwing good money after bad' as new investments seek to justify past investments.

Neither does there seem to be any obvious failure in the bankruptcy market. Creditors are certainly aware of the volatile nature of the aerospace industry. It is likely that a bankruptcy of Canadair, when it was purchased from General Dynamics in 1976, would have led to a rationalization and reorganization of production in an industry that is in a constant state of flux. Other crown corporations also suffer from overcapacity (like DeHavilland Aircraft, which receives government subsidies to produce the Dash-8 STOL commuter aircraft). It seems that the government has much more faith than the private market in the commercial viability of such risky ventures as the Challenger executive jet and the STOL commuter aircraft.

Of all the current cases in our study, none has received as much negative publicity as Canadair. Although the previously obscure costs have become more visible (and more subject to criticism), the assistance continues. What are the conditions that make it politically rational to keep Canadair alive?

First and foremost is jobs. Canadair represents a large workforce in the depressed Montreal economy. The Honourable Jean Chrétien, a key power in successive Liberal governments, spoke directly to the matter:

Aucun membre du Parlement n'aurait voulu signer la mise à pied de 7,000 personnes à Montréal, spécialement à cette époque du référendum. (Le Devoir, 14 avril 1983, 1)

Both the location and the size of the potential disruption are salient. With the election of the Parti Québécois in 1976 and the subsequent referendum campaign, Quebec had been a battleground over whether there were net benefits for Quebec in Confederation. At this point the federal government was unlikely to risk imposing visible personal costs on a large segment of Montreal voters. Regardless of the capacity of the labour market to absorb the Canadair workers, Ottawa did not want to *appear* to be casting these workers aside by closing down a crown corporation. Despite Canadair's continuing losses, this period in Quebec-Canada relations was not the time to 'pull the plug' on a large federally funded workforce in Montreal.

The political explanation of Canadair's continuing rescue rests in part on the effect of sunk costs and incrementalism. Although the total amount of public funding, almost \$2 billion, is astounding, the aggregated figures do not present an accurate picture of the process of political involvement. At no time were decision-makers faced with the prospect of giving or withholding that entire amount from Canadair. The assistance was provided on a more piecemeal basis. Most importantly, previous assistance was treated not as a sunk cost but as an anchor which established a commitment and a clientele. Much of Canadair's story is a collection of these interdependent decisions in which the weight of past practices and the low visibility of the costs of current decisions created a clear bias to continue.

The 1976 decision to buy Canadair from General Dynamics and turn it into a crown corporation is a classic example of the political attraction of public ownership as a policy instrument. Both the legal and institutional characteristics of crown corporations were important. The sources of funds for crown corporations permits low-visibility taxation and the mechanisms for accountability are generally weaker than for other parts of the public sector. Canadair was not a crown corporation under the Financial Administration Act (1951) but simply a government-owned company. Its funding and the framework for its accountability were rather vague. From 1976 to 1982, more than \$1 billion was advanced to Canadair through letters of comfort (which do not require parliamentary approval) signed by successive Ministers of Industry, Trade and

Commerce, including Robert de Cotret in the Clark government. The Report of the House of Commons Standing Committee on Public Accounts in the Summer of 1983 criticized the role of the responsible ministers for the lack of regular disclosure to Parliament, the excessive use of letters of comfort with no public disclosure, and the general lack of detailed information on the company.

The policy preference for public ownership of Canadair derived from several institutional characteristics. Given the government's strong commitment to the development of a Canadian aerospace industry and the large amount of prior public assistance the private-sector owner's (General Dynamics) residual monitoring incentives were seriously weakened. Moreover, given the high costs associated with obtaining information about the firm, the government faced the risk of strategic behaviour by the firm to exaggerate the size of the required assistance. Public ownership could reduce those monitoring and information costs. Given the government's commitment to the rather imprecise objective of the preservation and development of a high-technology aerospace industry with spinoffs for other sectors of the economy, public enterprise may facilitate this co-ordination of multiple and imprecise policy objectives.

The symbolic characteristic of a crown corporation also made public ownership the instrument of choice. Public ownership of Canadair was a way to dramatize the Liberal government's commitment to a Canadian aerospace industry and Canada's presence in high technology production.

This link between Canadair and the government's central policy objectives is important not only as a factor in explaining the choice of instrument but also the continuing assistance. Canadair and De Havilland were the focal points of the aerospace program. Although the Liberals were split among themselves as to what should constitute an appropriate industrial strategy for Canada, there was no disagreement that Canada needed high-tech winners and an international industrial presence. Supporting Canadair was a part of that image.

As more questions arose and the sunk costs weighed heavier, the jobs in Quebec remained an important concern. What was the political answer? First lower the visibility of the costs. In 1982, Canadair was moved to the CDIC and its debts were transferred to that company. Without the debts to service the new Canadair may make a profit. If the new company does require funds, CDIC will use a 'pool of revenue' from its subsidiaries, its \$3 billion borrowing authority, and its \$1 billion in

equity to help finance Canadair. Although the CDIC presents quarterly earnings reports to Cabinet and an Annual Report to Parliament, CDIC and its subsidiaries, e.g., Canadair, are not audited by the Auditor-General.

Not only were the costs made less visible, the symbolism was stepped up. In 1983, then Prime Minister Trudeau admitted that the government knew in 1981 that Canadair was in difficulty. He stated that the question at that time was whether Canada could allow an important sector to go 'belly up'. He believed that Canadians should not 'lose their nerve' in helping a high-technology industry (Hansard, 14 April 1983).

White Farm Equipment

Like Massey Ferguson, White Farm Equipment is a farm-implement manufacturer in Brantford Ontario facing a depressed market. Unlike Massey, however, White's earlier financial-bailout attempts were complicated by issues of foreign ownership.

In 1980, a US holding company, TIC Investments, purchased the farm-equipment portion of the financially troubled White Motor Company of the United States. However, their bid to purchase the Brantford plant of the Canadian subsidiary was blocked by FIRA. This led to the creation of a partnership between Linamar Machine of Guelph and TIC to purchase the Brantford plant not only to obtain FIRA approval but also to receive the financial assistance offered by the federal and Ontario governments. However, this somewhat artificial partnership led to friction and in 1982 the Brantford plant was closed with approximately 1,000 workers laid off in the already depressed Brantford labour market.

TIC Investments then offered to buy out Linamar. The Ontario government approved (their main concern apparently being to have the plant reopened and jobs restored) and the federal government, concerned apparently with US as opposed to Canadian ownership, ultimately agreed conditional upon a number of guarantees pertaining mainly to Canadian production. Financial problems continued however, ultimately resulting in a receivership.

A number of bids for White Farm were submitted but ultimately rejected by either the receiver or the two governments. The former rejected the bids on the basis of an inadequate monetary element; the latter rejected them because they lacked guarantees that the company

would continue in operation or that the axial-flow combine technology would remain in Canada.

A subsequent bid by Borg Warner, which included a number of guarantees on Canadian operations, received approval from the receivers, FIRA, and the governments. Given the proceeds from the sale and the loans guaranteed, the governments lost approximately \$8 million. A subsequent sale to a Canadian owner was financed by Borg Warner. The governments did not provide any financial assistance in this most recent resurrection of White Farm.

The labour-market issues with White are much the same as with Massey although the scale is somewhat smaller. The main legitimate rationale would seem to hinge upon the avoidance of labour-adjustment costs and their associated public-transfer payments until a time when the economy could better absorb the displaced workers. The viability of White depends upon dealer and customer perceptions that its existence will continue and be able to honour warranties and provide parts. This would be inconsistent with any strategy that attempted to assist White in the short run with expectations that long-run liquidation was inevitable. In addition, the long-run concerns noted in the Massey case – simply exacerbating adjustment costs – would apply. Finally, the earlier bailout had failed to restore employment levels; only 100 employees were retained in the profitable aspects of the operation.

No obvious failures of the capital market are evident. In fact, the capital markets had been actively involved in the earlier expansion and financial reorganizations (including the purchase of Cockshutt Farm Equipment in Brantford in 1962) that led to the development of White Farm Equipment Canada. In fact, in 1977 new private financial rearrangements were made with the Canadian and US banks to provide over \$300 million of revolving credit to the US parent.

The area where the capital market was clearly constrained was when FIRA disallowed the proposed purchase of the Brantford operations by the US-based TIC Investments. This action forced an unsuccessful partnership with Linamar to circumvent this regulation. This event does not imply a failure of the capital market to operate. Rather, the capital market operated rationally in response to an externally imposed political constraint. Whether the Brantford operation would have been restored were it not for this costly interlude is unknown; nevertheless, this interlude did inhibit the capital markets from attempting reorganization in a least-cost fashion.

With respect to a possible failure in the bankruptcy market the issue is more complicated. The day-to-day operation of the Canadian branch plant in Brantford certainly was hampered by the US bankruptcy proceedings of the parent company; White Canada had no cash of its own and the parent company's accounts payable were frozen. Since the US bankruptcy proceedings had no legal effect in Canada, however, this should really be seen as a short-term liquidity problem or a problem of bankruptcy regulation, not a problem requiring a government bailout.

Creditors were deterred from inducing bankruptcy because of the large number of liabilities that the company would have incurred (and did) upon closing: unfunded pension-plan costs, warranty and equipment-return claims, termination-pay claims, and dealer claims. In fact, the bankruptcy appears to be proceeding in an orderly fashion. Evidence that the bankruptcy market can redeploy those assets with a continued value-in-use is provided by a number of events: the bids received under the receivership procedure, the sale to Borg Warner and the subsequent going-concern sale of the plant to an Oakville purchaser. The transaction was concluded with the financial support of the Borg Warner Acceptance Corporation which retains some element of control in the form of convertible debentures. Finally, as of year-end 1984 the restructured company is performing well, without government assistance. The new owner has stressed a new marketing plan which includes more export sales and machine sales on advance order rather than through dealers' lots.

Although White Farm was one of the three farm-equipment companies bailed out during the prolonged downturn in the market in the late 1970s and 1980s, the political case for rescuing White Farm turned on narrow, firm-specific factors rather than any overall view of the future of the farm-equipment industry. One thousand employees initially at White Farm, dealers, suppliers, customers and members of the Brantford community all would have been adversely affected by the firm's closing. They were an intensely concerned and in some cases concentrated constituency seeking assistance. It was not only the employment implications that placed White Farm within the ambit of the Enterprise Development Bank, the arm of ITC that provides 'routine bailout assistance'. White Farm's export production was also cited by the Export Development Board (EDB) as a major reason to try to save the company.

However, it was the issue of foreign ownership that brought White Farm's case to the political forefront. The promise of \$10 million in loan guarantees from Ottawa and \$5 million in assistance from Ontario was put forward in support of a Canadian consortium to buy the failing company. When the Canadian consortium did not take over the company, the government provided the funding to the new owners (US and Canadian) on condition that White Farm's new owners maintain the Canadian jobs and purchase Canadian parts. The political interest in White Farm continued as long as there were threats of losing the technology and the employment to the United States. When, a year after the initial funding, the American interest (TIC) bought out the Canadian, both the federal and provincial governments allowed TIC to keep the loan guarantees in return for promises of guaranteed levels of Canadian employment, Canadian sourcing, and continued Canadian production.

Herb Gray, the Minister of ITC, initially used the threat of FIRA disapproval to dampen the possibility of a foreign takeover of White Farm. However, the Liberal government soon found itself in the politically unacceptable situation that a FIRA decision to restrict foreign ownership might be perceived as the cause of the firm's closure. The stance against foreign ownership which the Liberals generally found politically attractive, especially in southern Ontario, could not be maintained if it pitted foreign ownership directly against specific jobs. This runs counter to the basic axiom of political rationality; here large and well-defined costs would be imposed on a concentrated and informed group while long-term, abstract, or symbolic benefits would be dispersed across the electorate.

Had there been no threat of foreign ownership the employment factor may have been sufficient to generate a bureaucratically determined bailout of White Farm through the EDB. The threat of foreign takeover did give a greater symbolic importance to the requests for assistance. Economic nationalism was the main rationale here for providing assistance to enable a marginal company to defy the forces of adjustment.

Cooperative Implements

Coop Implements of Winnipeg, Manitoba is a farm-implements manufacturing co-operative, owned by its 91,000 members. As part of a traditionally volatile industry, the firm experienced the problems associated with the depressed agricultural market of the 1970s. Impending

bankruptcy was avoided in 1978 by a bailout of \$8 million: an interest-free loan provided by the federal government, \$7 million in loan guarantees by the Manitoba, Saskatchewan, and Alberta governments and loans of \$8.7 million from its creditors including the wheat pools, co-operatives and credit unions. Additional assistance in 1982 was provided in a \$45 million refinancing arrangement and a purchase by co-operatives of \$9.5 million of preferred shares; the company appears to be surviving through a policy of retrenchment and cost-cutting.

Any economic justification for the bailout on the grounds of a possible labour-market failure would have to rely on the minimization of adjustment costs associated with the decline of this industry. Job losses were inevitable in this industry which required rationalization and comprised other failing firms such as Massey Ferguson and White Farm Equipment. The only questions appeared to be: where, when and by how much?

The different regions can compete with subsidies in the hope that the job losses will be experienced elsewhere. While this raises the spectre of interregional 'subsidy wars', the region that values the jobs most (i.e., for whom the costs of job loss will be highest) presumably will pay the most and experience the fewest adjustments. Public assistance may also be justified however because it postponed the inevitable adjustment to a time when the economy could better absorb the displaced workers. This is especially the case if the high unemployment and depressed labour market meant that many of the workers would otherwise obtain unemployment-insurance or welfare assistance.

From a labour-market perspective, arguments against the bailout would hinge on saving jobs at Coop Implements resulting in fewer jobs elsewhere in the industry, including those of another Winnipeg farm-implements manufacturer, Versatile Manufacturing. In addition, while there was a concentration of slightly over half of the 1,364 jobs in the Transcona plant, this is proximate to the larger Winnipeg labour market. Many of the job losses would have been spread throughout the Prairies where conventionally the unemployment rate is not as high as in the rest of Canada. Lastly, volatility is an anticipated characteristic of the industry. Even if (in fact, especially if) the changes indicate a more permanent aspect of the rationalization and a long-run decline of that industry, the necessary adjustment may be impeded or exacerbated by the bailout. The adjustment costs may be experienced by workers in

similar firms that did not receive a bailout, presumably because they were more efficient and could survive the decline.

There does not appear to be any obvious failure of capital markets. It is very difficult to speculate on the result if a private-market receivership had been permitted; we do not have cash-flow forecasts for the firm under potential reorganization scenarios. The reluctance of the Manitoba government to enter the first bailout and the inability of the company to obtain sufficient capital through the banks, credit unions, and an equity drive strongly suggests that liquidation was a possible outcome. These private-market participants displayed little faith in the long-run viability of the company. The prospective lenders (certainly as well as any other group including the government) were able to evaluate the likelihood of the financial and market problems of Coop Implements being temporary and would have provided bridge financing had this been a viable option.

It is true that existing owners of the farm equipment produced by Coop were likely to lose if the manufacturer went bankrupt. There is no obvious market mechanism to provide 'side-payments' to prevent such an occurrence. Nevertheless, such losses are unlikely to be major for any single owner; they can be minimized by buying equipment from different manufacturers; they are dispersed across a large number of owners; and there may have been *ex ante* compensation (lower prices from manufacturers whose continued existence was in jeopardy). Although parts and servicing may not be as accessible if the company went bankrupt there is no reason to believe that such service would disappear in any redeployment of the assets. If there is an effective demand, it would likely be serviced by other firms with the existing assets.

There is also no obvious bankruptcy-market failure. Creditors were able to co-operate and extend the company's loan due dates in 1977 to prevent a default during the negotiation for bailout assistance. In addition, the co-operative market is reasonably well-developed in the Prairies and there is no reason to believe that the approximately 91,000 members who own Coop implements would place themselves in a position of particular vulnerability to other creditors' strategic behaviour. In fact, it seems that such behaviour was avoided in the bailout and subsequent financial reorganization; hence, there is no reason to suspect that it should be particularly acute in any insolvency bargains.

Because this case is one of the few firm-specific bailouts outside the concentration of industry in central Canada, its location is a large part of

this bailout's political importance. The failure of the firm stood to prejudice the position of 1,300 workers across the Prairies and all the company's dealers. However, political significance of the cost bearers extends much further. Thousands of farmers depended on Coop for services and parts. The company is the only farmer-owned agricultural-implement manufacturer in Canada and the largest in North America. The co-operative movement is a long-standing prairie institution. For Ottawa to refuse to intervene, was to refuse the co-operatives, which was to refuse the West. The demands for further assistance in 1982 were forcefully supported by Lloyd Axworthy, one of the only two Liberal MPs in all of Western Canada. As in the Chrysler case, requests for assistance are far more cogent when they are put forward by a member of Cabinet.

The initial assistance and the subsequent loan guarantees were provided through the Ministry of Agriculture and the governments of Saskatchewan, Manitoba, and Alberta. Much of the delays between the company's request and the government's response can be attributed to efforts by each government to pass most of the costs on to the others. At the federal level, the assistance was treated by the Department of Agriculture as a subsidy for a part of its clientele rather than an EDB-serviced rescue. Indeed Ottawa and the prairie provinces negotiated the cost division of the assistance. The provinces compared Coop's request for \$14 million to the larger sums provided to Chrysler, Massey and White Farm. The political basis for government aid to Cooperative Implements derives from its western location as articulated by an effective member of Cabinet, its link to an important symbol of the West—the co-operative movement – and the clientele relationship between the Ministry of Agriculture and the farming community. Like the other two farm-equipment company bailouts, the political decision focused on the plight of the individual firm and the expedience of providing assistance to it. The political case for Coop's bailout centred on assistance that shielded the firm from the forces of adjustment; it did not promote a political basis for facilitating an orderly adjustment process that would entail rationalization and contraction of the sector.

Minaki Lodge

The initial bailout of Minaki Lodge occurred in 1974 when the Ontario government purchased the lodge from private operators who were in

danger of defaulting on loans to the Northern Ontario Development Corporation and a US industrialist. Thereafter it was closed and renovated with expenditures of \$45 million (original approval was for a maximum of \$5 million). It reopened in 1983, under the direction of a private management chain but still publicly owned. No private interests would buy Minaki, given its several natural disadvantages as an elaborate tourist centre: mercury pollution, which destroys food and sport fishing in the surrounding water system; a short season, given the northern latitude; reliance on a rail system that no longer attracted passenger traffic; and the lack of easy access from large population centres.

The stated rationale for public involvement in a project clearly rejected by the private sector included: the stimulation of tourism in Northern Ontario; the creation of jobs, especially for native people, in an otherwise severely depressed region; the preservation of the historic value of Minaki Lodge; and as an offset to the substantial government subsidies Southern Ontario had enjoyed.

The job-creation rationale does not seem well-founded. Most jobs were filled on a seasonal basis by white, middle-class university students from Toronto and Winnipeg; only twenty-five of the 125 employees live within commuting distance, only fifteen of these are residents of Minaki, and there are only eight native people on staff. In addition, the tourist industry is constantly in a state of flux and has substantial mobility. If the industry is viable, it is likely that most Minaki employees would have found employment elsewhere; if not, they or others in similar situations could have been assisted at a fraction of the cost.

Neither the capital market nor the bankruptcy market seems to have exhibited fundamental failures in this case. The private capital market continued to reject the investment for sound economic reasons; the obvious economic solution would have been to liquidate the project. In addition, there were no elements of strategic behaviour that would have led to premature bankruptcy. The assets at the time of the original bailout and before the renovation were minimal. They could have been either redeployed or, if they had no value-in-use to others, considered sunk costs irrelevant to the decision to carry on the project for economic reasons.

The Ontario government rescue of Minaki illustrates the importance of location and regionalism within provincial politics. Northern Ontario has often been perceived as a second-class cousin compared to the more

industrialized south (Weller 1977). The NDP has been able to capitalize on this northern alienation and in this region often poses a major electoral threat to the provincial Progressive Conservatives. The Minaki case was no doubt affected by the Ontario government's desire to enhance its electoral prospects in the area. Leo Bernier, the Minister of Northern Affairs and MPP for the riding, strongly favoured the assistance. In essence, Bernier made the case that it was time for Northern Ontario to receive some political entitlements.

The initial decision to purchase the troubled Minaki Lodge was made in response to the devastation caused by the mercury pollution of the English-Wabigon River system, to the tourist industry in Northern Ontario. For the Tories, the purchase of Minaki was a highly visible and dramatic way to provide stimulus for the tourist industry and show concern for the region. Minaki was viewed as an immediate employment opportunity – hundreds of jobs could be created.

The \$45 million eventually spent on Minaki was the result of a series of related decisions. As is often typical in politics, the initial expenditure decision severely constrained the government's further options. What first appeared to be a relatively low-cost (\$5 million) 'gift' to Northern voters evolved into a far more expensive proposition; as the Tories got caught in their own symbolism. Since the 1974 takeover expenditures have increased and so have the political costs of termination. To scrap the redevelopment meant not only the loss of some \$45 million; it would indicate the government had continued to make a costly policy error. This was especially important to a government that has sought to project a strong political image as 'prudent managers of the public purse'. Most significantly, Minaki has become a symbol of government's involvement in the North; to turn its back on Minaki would be to appear to turn its back on the North.

As the costs of Minaki became more visible and more subject to criticism by the opposition parties, the government has sought to assuage the cost bearers with symbolism. Reuben Baetz, Minister of Culture and Recreation, argued a narrow cost-benefit analysis does not capture the essence of Minaki: 'Minaki will have a positive historic value, it is the finest small resort in Canada, and has turned Minaki from a ghost town to a world-class resort' (Ontario Natural Resources Committee 1982).

Minaki initially offered the Tories an opportunity to provide immediate, direct, and highly visible benefits to a marginal area. The costs

were dispersed and largely hidden. Although the policy dollars mounted up much more quickly than anticipated, the political benefits in the North may still outweigh any votes lost by Minaki in the rest of Ontario.

Clarke Irwin Publishing

Like many Canadian publishing companies, Clarke Irwin, a family-owned and operated enterprise and one of the five largest Canadian-owned publishers in Canada, had a history of government support. This support includes the Ontario Book Publishing Development Program, loan guarantees from the Ontario Development Corporation (ODC), and procurement policies for books used in Ontario schools. By 1980, Clarke Irwin's \$1.5 million loan guarantees were far in excess of the \$250,000 limit later imposed on the program. High interest payments, the recessionary economy, the market shift from textbooks to tradebooks, and poor management contributed to its ultimate financial collapse. In 1983 the firm was placed in receivership when the CIBC called its \$1.5 million loan and the ODC refused to guarantee further credit. Clarke Irwin has since been purchased by the Book Society of Canada Limited which may take on the name Clarke Irwin.

Clarke Irwin is an example of a programmatic bailout (the earlier \$1.5 million loan guarantee of the ODC) that was discontinued and that subsequently led to reorganization with managerial changes but few changes in the deployment of assets or employees. The earlier government support would not be justifiable on the grounds of labour-market failures because only about fifty employees were involved, they were in the Toronto labour market where they could be absorbed, other publishing companies were not going bankrupt, and the employees were unlikely to be permanently disadvantaged in terms of their income position. There was some concern that bankruptcy may have a domino effect because other publishing companies were creditors. However, the bankruptcy market obviously worked well; there were a large number of bids for the company and the eventual reorganization was smooth.

Neither does there seem to be any capital-market failure. The earlier loan guarantees were necessary to induce capital markets to invest in so much 'Canadianization' of the industry. However, this does not represent a capital-market failure but rather indicates that capital markets themselves will not underwrite the costs of such noneconomic, political objectives. In this particular case, it seems evident that such continuing

support can underwrite inefficiencies that will eventually lead to throwing 'good money after bad'. In the Clarke Irwin case, like that of Minaki Lodge, decisions took place solely at the provincial level. A comparison is useful to discern why political expedience led to continuing public subsidies for Minaki but not for Clarke Irwin.

The initial assistance to Clarke Irwin was part of a general program of the Ontario government to improve bank loans access for publishers and to address the under-capitalization of the Canadian publishing industry (90 per cent of which is located in Ontario). To qualify for assistance under the Book Development Program a publisher must be 75 per cent Canadian-owned and have annual net sales of Canadian-authored books between \$150,000 and \$625,000. At the start of 1983, fourteen independent Canadian publishers had loan guarantees under the program. The assistance to Clarke Irwin was a function of it being in a category of undertaking – Canadian publishing – for which there was an established political entitlement. When Clarke Irwin sought additional subsidies well beyond the limits of the entitlement, it was refused.

There were, in fact, few political benefits to be derived from additional assistance to Clarke Irwin. There was not a significant number of workers directly affected. Unlike Minaki, Clarke Irwin had no regional significance. Nor did it have an important Cabinet minister lobbying on its behalf. The riding had been held by the NDP since 1975 (See Table 25 above).

As in the case of Minaki, the imputed benefits were largely symbolic. Assistance to Minaki produced highly visible evidence of the government's concern for the North and for development of tourism in the region. Support for Clarke Irwin was justified as support for the Canadianization of the publishing industry. Unfortunately for Clark Irwin, its survival was not the only way in which those symbolic benefits could be obtained. The Canadian authors associated with the firm could easily go to other Canadian publishers. The presence of a Canadian buyer removed any fears of foreign takeover. In sum, the direct benefits derived from continued support of Clarke Irwin were too slight to be politically significant. Alternatively any symbolic benefits from supporting Canadianization would be forthcoming without any further spending on Clarke Irwin.

Whistler Village Land Co. Ltd.

The transformation of Whistler, BC from a primarily private-sector development to one with substantial provincial-government involvement occurred in part because of public concerns about the private development. Although the area was a booming, successful ski area, the community of Whistler appeared to be in need of redevelopment and there was concern that private water and sewage systems were becoming a pollution threat. The development of a resort community under the Whistler Village Land Co. Ltd. occurred with public assistance in various forms: land sales from the BC provincial government, \$10 million from a joint federal-provincial tourist industry program, the limiting of logging in the area, involvement of the Federal Business Development Bank, and federal tax shelters in the form of MURBs to foster private condominium construction. Like the Minaki Lodge scheme, provincial plans for Whistler involved an elaborate resort centre with a lodge, convention centre, and golf course.

However, problems arose with the collapse of the BC real-estate market in 1981 and the elimination of MURBs as a tax shelter in the 1982 budget. Costs of the resort facilities skyrocketed due to design problems and labour disputes. By 1982 the Whistler Village Land Co. Ltd. was taken over by the BC government, to be run as a crown corporation, WLC Developments Ltd., until it became profitable and could be resold to the private sector.

Considering possible failures in the labour market, the bailout does not seem to have an economic rationale. The area employed workers when it was a private development and private offers were made to purchase the assets even before the bailout. Resort jobs associated with operating the area and construction jobs for developing it are transitory and do not involve a set of especially disadvantaged workers. The jobs of an existing, established workforce were not really at stake and in fact most of the construction jobs involved hiring new workers at what amounted to fairly substantial wage settlements. Concession bargaining was not involved to preserve jobs. To the extent that such new job creation was meritorious, it should stand on its own right as part of a public job-creation program that would involve using workers in areas of their most highly valued public use (on these terms, the development of a luxury, international ski resort may not rank very high). Such job

creation, to the extent it is justified, should be part of an overall planned program and not evolve as a byproduct of *ad hoc* bailouts.

Further, the argument that the bailout was necessary to protect the province's investment of \$20 million seems misdirected. Any new funds spent on the project should be evaluated by comparison of the incremental benefits to those of other uses for the funds. The previous investment by the government is a sunk cost and should not enter the economic analysis.

Capital markets were operating; the area was a going concern on a private basis in the 1960s and 1970s, and after financial difficulties materialized, bids by private-investors were made and rejected. Presumably such bids would reflect the private revenue expectation from the highest value-in-use, whether that would be from locals, upper middle-class Vancouverites (who were heavily involved), British Columbians in general, international jet setters, or some combination of all users in whatever seasons. That such private development would not fully meet the needs of everyone – hippies, ski bums, families, and jet setters alike – is likely to be the case; nevertheless, it would reflect a response to the highest value-in-use of the resources. The private-market developments were unlikely to meet the all-season desires of the government and could have been undertaken by non-Canadians. Externalities, such as sewage pollution associated with such private development, could be dealt with by the conventional regulations that exist in other similar circumstances. To the extent that a single private developer would have a natural monopoly (unlikely given many proximate ski facilities) with its attendant socially undesirable pricing policies, public intervention can be justified. Whether this is best handled through regulation or government ownership is an open question. If such social costs are the real rationale for government involvement, this should be explicitly stated.

With respect to possible bankruptcy-market failures, the bailout by government takeover was rationalized as a means of preventing the secured creditors from triggering bankruptcy to obtain assets at 'bargain' prices. Since the secured creditors are unlikely to operate the area, the argument suggests that they would turn around and liquidate the assets to earn a profit. This argument fails to recognize the bankruptcy/reorganization process. First, the secured creditors' claim against the firm in default is equal to the value of the loan; if a liquidation or a sale to a third party generated an amount in excess of the secured creditors'

claims, the surplus would be used to satisfy *unsecured creditors'* claims. Secondly, the price paid for a firm in default will be equal, at the limit, to the present value of the cash flows that can be obtained from further operations. The potential bidder would prefer to obtain the firm at a lower price if possible. To the extent that the bidder is successful, the creditors will lose, but the continued operations of the area will not necessarily be affected.

Finally, even if the government's argument had some validity, it is difficult to understand why such strategic behaviour should be more likely in this particular case than in other situations of possible insolvency. Moreover, the Bankruptcy Act prescribes a mandatory valuation procedure when creditors disagree over the value of assets that have been pledged as security.

Whistler's 1982 rescue by the province must be seen as the outcome of a series of earlier events. By that time the province really had little choice – there was virtually no political payoff in walking away from Whistler. The early government involvement was a low-cost land transfer for which the NDP government could proclaim the entire province as beneficiary. The development of Whistler was to provide a resort for all British Columbians. The initial cost for these benefits would be shared by all Canadians through a federal-provincial tourist-industry program grant. The grant reflected another view of Whistler's benefits: that it would be a world-class resort bringing international tourist dollars to Canada. In sum, the preliminary public involvement in Whistler required little direct cash outlay by the province but promised direct benefits to voters who would use the facility and potential benefits for the entire BC economy. Moreover, the development had a strong symbolic attraction for the NDP – it was to be a resort developed for all the people.

When the Social Credit government replaced the NDP, it also supported the development of Whistler. It was not until 1981 that the project became precarious. Without direct public assistance, Whistler would have failed. A number of negative consequences would flow from the bankruptcy of Whistler Village Land Company. Without further support, the BC government's initial \$20 million investment would be lost. A large number of well-to-do Vancouverites who had invested in Whistler also stood to bear heavy losses. A failed Whistler would have been a disaster for the municipality; further, it would have released a concentrated (albeit small) group of workers on to the already troubled BC economy. If the bankrupt Whistler was acquired by a private

developer, there was no assurance that the developer would provide the public facilities that had been a part of the project's initial rationale. Even worse, if no one developed Whistler, it would stand as a white elephant, a constant reminder of a BC tourism failure. Alternatively, with little cash outlay (just the option value of the loan guarantees), the provincial involvement could generate confidence in the project. By acting in a visible manner to support Whistler, the province would be creating value for its investment.

The choice of crown corporation as the rescue instrument derives from some of the legal and functional characteristics of state enterprise. If further costs for developing Whistler were to be incurred, they would be less visible if it were a crown corporation. Given the sometimes incompatible objectives of creating a world-class tourist resort and providing a public facility available to all British Columbians, policy instruments to influence the private firm's behaviour might prove more difficult than internalizing the trade-offs in a single public enterprise. Moreover, the substantial public stake in the success of Whistler would leave the province vulnerable to the strategic behaviour of a private developer. With Whistler under private management, the province could face the risk of exaggerated subsidy demands and the threat of closure.

Once it is recognized that the failure of Whistler was in fact a threat to the government both in terms of the costs imposed on Whistler investors and the negative effects on the BC government's economic-development objectives, it is clear that the purpose of the incentives was more than to prop up an ailing firm. Nor was the purpose to ease adjustment burdens or to buy time as in the cases of Chrysler or White Farm; this project *had* to succeed. The public takeover would ensure this success by providing, if necessary, further public funding for the pursuit of the international tourist objective while at the same time developing facilities for the BC public.

Canada Cycle and Motor (CCM)

Canada Cycle and Motor (CCM) was a bicycle and sporting goods manufacturer controlled by the Levy family until 1979. CCM's financial problems stemmed from overexpansion and competition from both cheaper imports and new domestic producers that expanded under tariff and surcharge protection. In addition, a fire at one of its plants, high interest cost on its borrowing, and high wage costs contributed to its decline.

The bailout 1977 followed a request by Levy Industries after the Canadian Imperial Bank of Commerce (CIBC) threatened to call loans in the range of \$6 to \$8 million. The federal government, through the Enterprise Development Board (EDB), agreed to guarantee \$8.2 million in loans to implement restructuring plans. For this assistance, the EDB received an option to purchase CCM. Following additional losses, CCM was put up for sale. To ensure that the company remained in Canadian hands, the EDB exercised its option to buy CCM and then resold it to a Montreal family company, Maxwell Cummings and Sons. The sale was assisted by an EDB loan and a loan guarantee on a \$11 million loan from the Royal Bank. As a condition of the financial assistance Cummings had to maintain the two CCM divisions. After this sale, problems continued, requiring personal guarantees on bank debt and an unsuccessful attempt to raise new equity capital, mostly from the owner, Cummings. Facing continuing financial problems, the government discontinued its support; the Ontario government declined to provide financial assistance and in 1982 CCM was bankrupt. A holding proposal under the Bankruptcy Act was implemented but subsequently the proposal was not approved by the Supreme Court of Ontario in Bankruptcy.

The initial 1977 bailout does not seem justified on grounds of any specific labour-market failure. The approximately 700 employees in the Toronto plant were in a large labour market and a number of new domestic bicycle producers were entering the market in response to the domestic protectionist measures. Moreover, given the demand for bicycles, it is not obvious that a CCM default would have led to a liquidation. Either a reorganization of the capital structure or perhaps a sale of CCM to a new company, would have resulted in the continuation of the operations, and was a more likely outcome. The 450 jobs in the St. Jean plant were unlikely to be threatened; that division was profitable and could easily be sold because it specialized in the more robust sporting-goods market. In addition, the threat of job losses in the Toronto plant (based on the impending bankruptcy in 1982) was not sufficient pressure for the employees to agree to concession bargaining. In fact a two-and-one-half month strike occurred in 1982 and the 190 remaining workers received a substantial settlement in a three-year contract that left CCM with labour costs 80 to 100 per cent higher than its bicycle competitors.

It is also difficult to pinpoint any obvious source of capital-market failure. The banks and family-holding companies had earlier supported

CCM with government-backed financial assistance. The initial bailout did not appear to be a response to any market failures; other firms were not only surviving but actually entering the market. The EDB requirement of the option to purchase CCM and the continuing disquiet of the CIBC, even under the loan guarantee, implies that the bailout was a temporary holding operation.

The subsequent sale and loan-guarantee assistance with a new bank was undertaken outside of normal bankruptcy-receivership procedures to keep the company in Canadian hands. The need for personal guarantees on bank loans and the attempt to raise new equity capital under the Cummings ownership probably had its roots in the use of loan guarantees; these guarantees are expected to result in debt-intensive capital structures since the borrower can use the guarantee as a substitute for equity capital. Thus the resulting capital structure and the continuing poor performance of the firm required an injection of new equity.

The reluctance of the capital markets to provide this equity either before or after the holding proposal coupled with offers to purchase certain of CCM's assets are rational responses to the state of the market for CCM products and the low probability of success in the reorganization of the company.

Similarly, there were no bankruptcy-market failures in this particular case. It is true that the federal Department of Justice disallowed an attempt to convert EDB loan guarantees into preferred-share debt which made a restructuring more difficult. However, a continued bailout would not be appropriate to override such a judicial decision. It is also true that a product-liability action was outstanding and that the UAW union was a contingent claimant on behalf of some employees. However, a bailout would not be an appropriate instrument for settling such claims. To the extent that they are legitimate claims and are avoided by bankruptcy, changes in the Bankruptcy Act would seem appropriate. In general, the bankruptcy arrangements seemed to work smoothly, with Gestion R.A.D. purchasing the assets and reselling many, including the right to the CCM name, to other sporting goods and bicycle companies. This highlights the fact that under bankruptcy the assets do not disappear, but rather are reallocated, presumably to more efficient uses.

In the 1970s when Canada's leading bicycle manufacturer came upon hard times, it sought trade protection from foreign competitors and direct financial assistance from government. By 1977, the impending failure of

CCM raised the spectre of the loss of 700 jobs in Toronto and some 450 in Quebec. The Toronto plant was in a riding that federally had been won by the NDP in 1972 and the by Liberals in 1974 by less than 2,000 votes. The Quebec riding had given the Liberals solid support in 1972 and 1974.

The political salience of CCM's demands for assistance appears to have derived as much from the owners as from the workers. CCM was a part of the holdings of Levy Industries. The Levy family had longstanding ties with the federal Liberal party. These political ties may help to explain why the federal government was willing to assist but the Ontario government, no less sensitive to the link between job loss and votes, would not help. The provincial governments have played a part in virtually all of the federally funded bailouts of private-sector firms in our study (except Maislin). If anything, the provincial governments seem to have been more sensitive to the political importance of preserving employment.

The federal government through the EDB moved extremely quickly when the company appealed for help. Accounts indicate that in providing the loan guarantees the EDB overruled the recommendation from bureaucrats in ITC (*Canadian Business*, 31 May 1981). In providing the loan guarantees the EDB narrowly focused on the plight of the firm rather than the problems and potential of the industry as a whole. Further, the assistance was not tied to rationalization or restructuring within the firm; it simply maintained CCM's inefficient management and production techniques. However no more assistance was forthcoming after 1982. Despite federal financial aid and protection from overseas competitors, CCM was not able to survive on its own. Several events altered the political salience of CCM's demise. First of all, the company was no longer owned by the Levy family. Second, the political benefits of saving jobs would only apply to a very scaled-down force of 190 workers in Toronto. Given that the millions of dollars in loan guarantees had done nothing to improve the basic competitiveness of CCM, by October 1982, the future political benefits of continuing the bailout were too small to justify further assistance.

Electrohome

Electrohome Industries of Kitchener Ontario, which has a workforce of 2,200, is mainly involved in consumer-electronics services, industrial electronics, communications and furniture. In 1977, after being caught

in a down-market for consumer durables following company expansion, the company was assisted by a loan guarantee of \$15 million through the Enterprise Development Program (EDP) of the federal Department of Industry, Trade and Commerce. Its financial difficulties stemmed from the intense foreign competition of the 1970s and the fact that its expansion program was curbed by recession. Many of its earlier activities were assisted by government-support programs: a regional-development grant in 1974 to establish a furniture plant in Nova Scotia; a duty remission for the import of televisions when matched by domestic production; and a contract for research and development in solar energy.

By 1981 the company appeared to be on the road to recovery and the EDP earned \$10 million from the exercise of stock options it had obtained as part of the loan guarantee. The recovery, however, had required major reorganizational efforts: a new Chairman and CEO; the disposal of a number of major assets; substantial employment cuts; importing cheaper components; and diversification and reorientation away from the consumer market and towards the more high-technology export markets.

Although the final verdict is not yet in, the bailout of Electrohome has been a modest success. Electrohome continues to show losses, but they are largely due to an expensive transition to high-technology equipment which may be profitable in the future. The Ontario Development Corporation provided a \$500,000 interest-free loan to Electrohome in 1982 as part of a \$5 million expansion project. Interest payments commenced in August 1984. This loan, undertaken during a period of high interest rates, reduced the effective interest cost of the project over the interest-free period. It is worth noting that the success was achieved with a minimum of restrictions on the new management, allowing them to follow basic economic principles rather than constraining them with noneconomic constraints (e.g., assets could be reduced, employment cut, and imports increased). It is also worth noting that the economic viability of the newly reorganized firm allowed it to engage in activities (e.g., high-technology production and exports) that are often regarded as desirable for other reasons. These activities were undertaken for their own commercial viability and not simply to achieve other objectives the attainment of which would require public subsidies.

The economic rationale for government involvement in this particular case is not clear – at least not according to the economic criteria outlined earlier. Preventing the income loss of otherwise displaced workers does not seem to have been paramount; employment cuts were allowed and

the potential employment losses would not have involved mass layoffs in a single location where Electrohome was the dominant employer. In the event of insolvency in such depressed times it is possible more workers would have been receiving unemployment insurance, welfare or other transfers whose cost would have been greater than the expected cost of a loan guarantee (and loan guarantees do not involve an increase in the measured unemployment rate).

It is very difficult to detect any market failures that would have necessitated government intervention in this case. As observed in the ratio analysis in the case study, signs of impending financial distress were clear from 1974 onwards, and early in 1977 the capital market was functioning well when a threat by the company's banker (the Royal Bank) to call an outstanding loan resulted in a new management structure and a number of important strategic and financial decisions.

These remedial actions were not sufficient in the short run to stem the financial problems. Under the bailout assistance the bank altered its outstanding claim on \$10 million of short-term debt to a loan with a fifteen-year term. This loan had new asset security and a pledge of outstanding Electrohome shares. The government involvement was to provide insurance on a \$15 million loan.

Based on its pre-assistance capital structure, the company could have used an injection of new equity. In fact the bailout resulted in a debt-intensive capital structure which was quickly reduced by the company. The needed equity injection occurred in an indirect way through the loan guarantee which provides the lender with an equity cushion.

The factor which makes this bailout assistance interesting is the condition for providing the assistance. As in all EDB-provided insurance, a 1 per cent insurance fee is charged. Because this fee is independent of the EDB's risk, there is an incentive to take the assistance only for companies of above-average risk. In this case the EDB also took an option to purchase 436,005 class A shares at \$2.06 before stipulated points in time. The loan insurance can provide windfall gains to equity holders, but this option removes these gains and makes the equity holders pay an appropriate price for the loan insurance.

The essence of the Electrohome arrangement is that no subsidy flowed to the existing equity holders and the resulting wealth outcomes to bondholders and stock holders are similar to those which would have occurred under a reorganization without government intervention. Under the latter there would have been the direct injection of new equity but the

bank would still have restructured its claim. All participants believed that the firm was viable in the long run and that a reorganization was preferable to a liquidation.

Considering the bankruptcy market, reasons for intervention are nonexistent. The number of actors is small (the Royal Bank and the Pollock family interests representing 33 per cent of the shares) so transaction costs and strategic behaviour would not have been major obstacles to private reorganization. The earlier financial constraints faced by the company were typical economic ones (e.g., import competition, recession) rather than government-imposed constraints which the government may have felt an obligation to offset with bailout assistance. On the contrary, the earlier government intervention had provided assistance for the company.

In the absence of well-defined market failures in the labour, capital, or bankruptcy markets it appears that the government bailout assistance was not motivated by any economic rationale pertaining to a market failure. It is unlikely that expectation of commercial success was the motivation; sufficient private-market involvement would have been available and there would have been no need for government intervention. Judging the venture as a success *ex post* does not necessarily justify the decision for economic reasons *ex ante*. This important theme will recur in studying a number of other bailouts that, *ex post*, appear to be success stories.

One possible justification for the bailout is that the federal government wanted to maintain a Canadian presence in the high-technology and consumer-electronics areas. An unrestricted reorganization through the capital market could have resulted in non-Canadian entities bidding for Electrohome.

Electrohome received its financial assistance in what could be described as part of the normal working of the Enterprise Development Program (EDP). Unlike Maislin, Chrysler, or Dome, which were treated *sui genesis* with the ultimate decision to rescue taken by Cabinet, Electrohome's case is an example of a programmatic or bureaucratic rescue. In that light, Electrohome provides an opportunity to examine the political basis for institutionalizing firm-specific assistance.

What are the attractive features of this form of assistance? Assistance to weak firms targets firms whose failure would have a direct and immediate employment consequence. If desired, the aid can be directed toward the losses of investors as well as workers. The costs, especially if

in the form of loan guarantees, are easier to conceal than the more massive expenditures required for general labour-adjustment programs. The likelihood that such aid to weak firms will contribute to an inefficient industry structure and to excess capacity within a sector are long-term costs that often receive little attention. Moreover, assistance to maintain firms and to save jobs is more appealing symbolically than industrial policies that acknowledge decline and facilitate sectoral or firm shrinkage and the shedding of labour.

The institutionalization of bailouts would appear to require some set of clearly defined objectives for screening claims. However, the institutionalization of medium- and small-scale bailouts through the EDP (and the Ontario Development Corporation) has not been accompanied by a set of clear objectives or a tightly drawn set of criteria for screening the diverse claims for assistance. In most cases the EDP has cited multiple objectives underlying assistance to each firm. (See the case study on bankruptcy and the EDP in Vol. II). The reasons most often stated include the firm's export potential, import substitution, general employment effects and regional employment effects. Although these objectives are quite broad, they have little to do with the long-run efficiency of an industry. Programs like the EDP seem to pay excessive attention to the plight of particular firms and less to the problems and future of an industry as a whole. The stated criteria for eligibility for EDP assistance – significant burden and lender of last resort – focus entirely on the firm. In order to qualify for a loan, a firm had to show that the project could not be undertaken without external funding. As lender of last resort, assistance was based on the presumption that the firm had exhausted all other sources of funding. The 1982 Auditor General's report has criticized the wide discretion of the EDP. The vague guidelines under which the EDP has operated have served to create a pool of discretionary funds to deal with adjustment by shielding some firms from market pressures. In short, there is no evidence that institutionalizing the bailout process under the EDP substituted predetermined criteria for short-run political pressure.

Institutionalizing bailouts through the creation of a bureaucracy and a process committed to rescuing marginal firms may well increase the incidence of business bailouts because of moral-hazard problems for the firms and incentives for government officials to stimulate demand. This problem is exacerbated in the absence of clearly defined criteria of eligibility. The case of Electrohome demonstrates the danger that, under

such programs, government may well become the lender of first resort. Given the rather flexible guidelines, Electrohome was a likely candidate for assistance for several reasons. Its failure or shrinkage had implications for over 2,000 workers. The company was already of interest to ITC as part of the Ministry's efforts in 1977 to shore up the Canadian television industry against Japanese and American competition. Assistance to Electrohome could also be justified in terms of Ottawa's desire to maintain a Canadian presence in the high-technology and electronics areas.

Consolidated Computer Incorporated

Soon after its inception in 1968, the Ottawa-based, Canadian-owned Consolidated Computer Inc. (CCI) began a history of government support: industrial-assistance programs in 1972; a bailout from receivership in exchange for an equity position in 1971 (Ottawa and Queen's Park acquired a 40 per cent interest); and loan guarantees from 1972 to 1976. In November 1981, CCI was sold to another Ottawa-based computer company, Nabu, with the federal and Ontario provincial governments accumulating a total loss of \$125 million for earlier support of CCI. In 1983 Nabu split into two companies, with its spinoff Computer Innovations Distribution Inc. receiving the CCI holding. In March 1984 the company placed CCI in receivership.

CCI was a manufacturer of computer-related hardware such as data-entry systems and small business terminals that are used to support main-frame computers. The stated rationale for the continued government support was the need to maintain Canadian involvement in the high-technology computer industry to support the high-skill and high-education jobs involved and to encourage high-technology exports to reduce the trade deficit in that area. In addition, support was necessary to counteract support provided by other national governments to their computer industries and to complement support granted by the Canadian government to other sectors of the computer industry, including firms that were subsidiaries of US companies.

There appears to be little allocative efficiency rationale for government intervention in the CCI case. There was unlikely to be large income losses of otherwise displaced workers; they were already experiencing fluctuations in employment associated with the volatile computer industry (e.g., employment going from 675 to 450 in 1975); the numbers

are not large relative to the Ottawa labour market; and most importantly, the skills were in short supply in the 'silicon valley' around Ottawa (Nabu bought CCI in part to obtain its 350 skilled employees). In addition, even if there were income losses and adjustment costs they would be falling on highly skilled and educated workers who are not in a disadvantaged economic position and were likely receiving a compensating wage associated with the uncertainty from the risk of job change in the volatile computer industry. In essence, the situation was hardly one of mass layoffs of workers into a depressed labour market who would be disadvantaged and have to be supported by other government transfers.

Although there is the potential for market failures in the capital market, their application in this specific instance is questionable. On one hand, firms with growth potential in high-technology industries have difficulty obtaining debt capital; future growth opportunities do not provide good collateral for a number of reasons. First, there is substantial uncertainty concerning the ultimate success of the undertaking and lenders may prefer to ration capital rather than increase the interest rate (the latter would attract companies with risks greater than anticipated). Secondly, the assets of the firms frequently are not physical; they are largely intellectual. Thirdly, growth opportunities that materialize in the future may not be undertaken by the equity holders if the results primarily will benefit the holders of the firm's liabilities. These three problems are examples of strategic behaviour by equity holders. If severe, they can result in market failure either at the time the initial financing is required or at the time of reorganization due to financial distress.

The obvious solution is to fund these growth opportunities with equity and if they materialize, issue debt. Alternatively, the firm may be forced to merge to obtain the needed financing. If equity markets for small firms are not functioning well, or mergers, perhaps with foreign companies, are unlikely, government involvement may be the only way the firm can obtain its needed financing or reorganization. Of course, the government now bears the risk of opportunistic behaviour by equity holders. While this argument may have had some force in the initial bailout of CCI, it becomes less convincing considering the sequence of loan guarantees from 1972 to 1976. These guarantees suggest that the future growth opportunities failed to materialize and loans based on promised results are not forthcoming in a rational market.

Further, heavy capital requirements were essential due to competitive pressure to lease rather than sell the computer equipment. Nevertheless, selling is obviously possible at some price, private arrangements for the capital backing can be made (and had been with Ford Motor Company), and mergers are possible – in fact the ultimate buyer, Nabu Manufacturing, itself was formed by a merger of six smaller firms in the industry. The ultimate purchase by Nabu illustrates that the assets of otherwise failing firms can easily be redeployed when they have value-in-use.

The earlier government involvement seemed to delay the ultimate reorganization; Central Dynamics withdrew its purchase offer in part because of Treasury Board's interference with their attempts to restructure CCI and improve its efficiency. In addition, the government loan guarantees seem to have exacerbated, not alleviated, any problems of moral hazard and adverse selection. These loans were used for expansion (e.g., building a North American branch network, leasing a new plant, starting two new lease subsidiaries, and expanding research and development) at a time when reorganization and retrenchment may have been appropriate.

With hindsight it is easy to see that government support for CCI was not merited for economic reasons. Nevertheless, it also appears that *ex ante* it did not make economic sense, as evidenced by W.A.B. Anderson's report to the Treasury Board. It appears that noneconomic factors must be used to explain such continued support in the case of CCI.

Over a period of eleven years Ottawa provided \$119 million and Queen's Park provided \$6 million to sustain CCI. Why? The continued existence of a symbol of Canada's presence in the high-tech arena was purchased through a series of dispersed and low-visibility, indeed at times obscured, costs. It was only when the aggregate costs and net failure of the rescue were publicized that it was no longer politically rational to fund CCI.

Unlike most of the other bailouts in this study, no large number of jobs in direct peril constituted the driving political force for assistance to CCI. The company's link to the Liberal government's broad policy objectives and the lack of accountability in the process of rendering assistance are the main political explanations. The computer industry, so central to a place in the international industrial economy, has high barriers to entry. Virtually all of the other developed nations have provided some form of assistance to facilitate their indigenous computer companies (Zysman,

1977; Johnson, 1982; Zysman and Tyson, 1983). In the late 1960s, a Canadian computer company was central to the Government's desire for a Canadian presence in high technology. CCI was to be a part of the critical mass of high-tech firms that made up Silicon Valley North. Immediate symbolic rewards and more distant material benefits were the basis for the initial assistance to CCI.

ITC continued to nurture its client with a series of loan guarantees from the General Adjustment Board and later (post 1977) from the Enterprise Development Bank, as well as with research and development grants. In 1976 under the financial reorganization of CCI, the various government debt instruments were converted into equity. Ottawa held 53 per cent of CCI and Ontario held 16 per cent. When the opportunity arose in 1976 to sell CCI to Central Dynamics, it appears that Ottawa was not willing to give up control over CCI to a private-sector firm especially a foreign-owned one. This position probably reflects the substantial government interest in a definite Canadian presence that was diminished by restructuring or rationalization. It also reflects the many spinoffs perceived to be associated with an indigenous computer industry and Ottawa's fear that some of those benefits might be lost in a private (especially foreign) firm's pursuit of profit.

Ottawa's equity position in CCI and CCI's continuing need for assistance raised the very problem pointed to in the Auditor General's Report of 1982. The Report suggested that when government has assumed full or part ownership in a firm, decisions on future assistance to the firm should be independent of the Department (Report of the Auditor General 1982, 278). In the case of CCI, the EDB continued to make funding decisions even though it owned over half of the company. In each instance a perverse view of sunk costs weighed heavily; for the bureaucrats it was considered less costly to continue than to lose what had been spent. The actors close to the situation had every incentive to maintain a positive view of CCI. Those at CCI and in the EDB (one individual was in both) continued to seek more low-visibility funding to turn the company around. For the EDB, providing additional funds meant avoiding or at least deferring the political embarrassment of acknowledging failure.

The case of CCI indicates the dangers that arise when a government aid agency ends up as owner, manager, and banker of the firm it is helping. The bureaucrats continued to believe that failure could be turned into success with a little more assistance. The policy process imposed few constraints on their acting on those beliefs. A series of low-

visibility loan guarantees enabled CCI to carry on. Partial information and symbolic reassurances had largely attenuated any control by politicians over the civil servants. Their limited accountability for the operations of CCI meant that politicians pursued the objectives of Canadian economic nationalism without an accurate assessment of the full magnitude of the costs of attaining such goals.

It was not until 1981 when the opposition began to direct a sharp focus on the costs (and benefits) of CCI that the symbol of Canada's entry into the computer world began to tarnish. The previously invisible costs were added up and the continuing failure of the company made them all the more embarrassing. Once the symbolic basis was severely weakened and the relationship between the company and its bureaucratic overseers was subjected to much criticism, whatever political constituency existed for a publicly funded Canadian presence in the computer industry would not be mollified by continued efforts to prop up CCI.

Maislin

The financial collapse of Maislin Industries, a Montreal-based, Canadian-owned, family-controlled trucking company, occurred after an aggressive nondiversified and costly expansion program. This expansion saddled Maislin with an enormous debt at a time of rising interest, fuel, and labour costs and declining revenues due to the recession and deregulation in the United States trucking market. While this may be a confluence of a series of unusual events, again, if the problem was regarded as transitory, bridge financing could have been arranged. Further, other trucking companies survived similar circumstances, perhaps because of lower debt exposure or greater managerial efficiency.

After its financial collapse and the refusal of the CIBC to grant additional loans, Maislin approached the federal government and was given a loan guarantee for CIBC refinancing in 1982. The CIBC provided credit facilities of US \$55 million of which \$34 million was insured by the federal government. However, within a year Maislin was bankrupt with reported debts of \$98.26 million (\$40 million to the CIBC) and assets of \$75 million.

While concern over the jobs of Maislin's 2,000 Canadian employees was certainly raised as a justifying issue, it is unlikely that this is a legitimate economic rationale for bailout based on a labour-market failure. There are a number of reasons: much of Maislin's business and

associated employment could be picked up by other trucking companies; the work involves skills that are usable in a number of other companies and there is already considerable inter-firm mobility; to the extent that Maislin's business and jobs were protected by a bailout other jobs elsewhere in the industry presumably would be lost given the industry's overcapacity; and although some jobs were concentrated in Montreal, this is a fairly large labour market and many other jobs were spread throughout Ontario and the United States.

In addition, the employment concerns of the Maislin workers themselves were not sufficiently strong for them to engage in substantial concession bargaining after their large settlement in 1981. Some did agree to voluntary loans to the company of up to 15 per cent of wages and the Maislin locals eventually agreed to stay within the '6 and 5' guidelines for the first two years of their 1983 agreement. However, the union leadership opposed the loan plan; they had earlier rejected the '6 and 5' guidelines as part of the loan guarantee and in fact the eventual '6 and 5' settlement was accompanied by 'back-end loading' so that the actual increase over the two-and-a-half-year settlement was 26 per cent. Obviously, there can be debate over the extent of concession bargaining that occurred; nevertheless, the threat of job losses was not sufficient to offset the union's concern for the precedent-setting effect that concessions at Maislin could have with other locals. (This appears to contrast with the United States where substantial concession bargaining has occurred in the master contract with the Teamsters and the US trucking companies caught by deregulation.)

Employees were among the creditors; there were some unpaid wages and benefits. Whether their claims are more meritorious than others, however, is a matter that should be dealt with through the Bankruptcy Act rather than *ad hoc* bailouts.

There does not seem to have been any capital-market failure to prevent the redeployment of Maislin's assets. Many are in a fungible form and can be used by other carriers including independents. In fact, the deregulation of the trucking industry means that assets probably will have to be redeployed from the large, formerly protected carriers to the smaller ones that will now compete on formerly regulated routes. The extent that Maislin's assets are not fully redeployed reflects an overcapacity in the industry; the withdrawal of Maislin's assets would certainly ease that overcapacity. Since Maislin itself was Canada's largest carrier its exit would not facilitate a monopoly amongst the

remaining carriers; rather the failure of Maislin suggests that economies of scale may not be substantial in the industry. Much of Maislin's business could be picked up by others; since the bankruptcy, Consolidated Freightways of California has purchased Maislin's Ontario and Quebec trucking permits and seven other trucking companies applied for temporary permits to take over routes formerly operated by Maislin.

There appears to be little doubt that a receivership/bankruptcy (in the absence of the government bailout) would have resulted in a liquidation; the long-run viability of the company was questioned even by the bureaucrats in the government departments that ultimately provided the bailout. However, as noted above, this would be the rational response in a well-functioning market.

One interesting sidelight is the attempt by the federal government to minimize wealth transfers in the bailout by obtaining options to purchase 15 per cent of Maislin stock for \$1 per share up to two years beyond the life of the guarantee. However, given the expected profitability of the company, the value of these options was probably minimal.

With respect to possible strategic behaviour in the bankruptcy market, it is the case that the CIBC was Maislin's largest creditor with approximately \$40 million of its outstanding debt of \$98 million. There were approximately 2,000 other creditors of which more than 1,500 were unsecured. Clearly such a large number of creditors with different risk exposures can make co-operation difficult and strategic behaviour a possibility. Given their dominant and secured position the CIBC had a strong incentive to call their loans even if that meant bankruptcy. In fact, based on the financial ratios in the case study for the years 1980 and 1981, it is surprising they did not do so. Political commentators suggested that the CIBC's co-operation with the bailout rather than calling their loans was a *quid pro quo* for government assistance with Dome, where the CIBC was heavily engaged. In addition, the CIBC attempted to improve its position in the bailout agreement by taking options on 10 per cent of the Maislin stock exercisable at \$1 per share. Whether this is a failure in the operation of the bankruptcy market or not is an open question; presumably the other creditors could anticipate this behaviour on the part of the dominant secured creditor. Moreover, having one dominant secured creditor eliminates strategic behaviour *within* the class of secured creditors.

In essence, it does not appear that the bailout of Maislin could be justified on the economic grounds of failure in the labour, capital, or

bankruptcy markets. This is a situation where market reorganization occurs all the time and can occur with a minimum of disruption, at least relative to many of the other bailout situations.

The bailout of Maislin raises an important issue of inter-firm equity within a particular industry. The bailout instrument that was used (loan guarantees) is firm-specific. However, if the industry in general is in financial difficulty the use of a firm-specific assistance will generate pleas of favoritism and requests for assistance from other companies. This may not be a major problem when a single firm in an industry is in financial difficulty. One possible lesson from the Maislin bailout is that if market failures are a problem and the industry generally is in financial difficulty, any government assistance should be industry-wide.

Although allocative efficiency might suggest industry-wide assistance, political circumstances will often dictate otherwise. As is the case in virtually all bailouts in this study, the rescue of Maislin helped the firm defy the forces of adjustment. There was no evidence of assistance as an instrument to facilitate long-run industry viability. The justifications for the efforts to rescue Maislin were familiar: the bailout would save jobs and preserve an important Canadian company. No doubt there were perceived political benefits from maintaining the jobs of Maislin's workers. However, there were also political costs because some of the cost bearers, the other firms in the industry, mobilized to press countervailing demands. Indeed in terms of direct electoral support, the rescue may not have yielded any net benefit to the Liberal government.

Unlike most of the recent Canadian bailouts (CCM is the other exception) in which political expedience worked in the same direction for the federal and provincial governments, in the Maislin case the provincial government refused to provide any support. The Quebec government did not perceive any benefits from bailing out Maislin and did not support Maislin's rescue when the costs would have been externalized to the federal government. As in the case of CCM, the disjuncture between federal and provincial interests may be explained in part by the particular ties of the firm's owners to one political party. Several accounts of the events leading up to Maislin's bailout have pointed to the close relationship between the owners of Maislin, their friends and the federal Liberals. It is this connection, absent at the provincial level, that may explain the Cabinet's willingness to assist Maislin. There is little evidence that the firm's failure would have left the Maislin workers with no alternative opportunities. On the other hand the negative effects of

the rescue were felt keenly in the other firms in the industry. Moreover, the very institution set up to rescue the failing firms, the EDP, did not recommend assisting Maislin. If nothing else, the service sector was outside its terms of reference. Indeed, in June of 1982, a month before the bailout was announced, a report of ITC and the Department of Regional Economic Expansion (DREE) termed Maislin 'technically bankrupt', in part due to its poor management practices. A bailout would not solve Maislin's long-term problem; Maislin was assessed as a poor risk for loan guarantees (*Montreal Gazette*, 26 June 1982). Yet Cabinet ministers saw the overall benefit from rescuing Maislin. Senior and powerful ministers from Quebec argued in favour of assisting the company (see the Maislin case study in Vol. II). Herb Gray, the ITC Minister and staunch advocate of aid to Chrysler, was not in a position to press his Department's negative recommendation.

Culminating a process marked by extreme secrecy, \$34 million in loan guarantees were provided to Maislin Industries. The assistance was not enough. Although Maislin sought more loans from its bankers, no further public assistance was requested, supposedly because Maislin was aware none would be forthcoming. What changed the political calculus? Why was further assistance not in the government's interest? Once the decision to assist Maislin was made public, the cost bearers, both within the industry and outside, began to mobilize. The secrecy that characterized the decision-making could not be maintained. The opponents made the distributive consequences of the transfer clear. At the same time, the symbolic assurances that Maislin was a significant Canadian enterprise were subject to challenge. Further assistance would violate a basic axiom of self-interest – the costs of assistance were now seen as direct and concentrated while the benefits were, at best, vague and dispersed symbolic assurances or at worst concentrated on a very small number of inframarginal voters.

Dome Petroleum

The current bailout proposal for Dome was preceded by a sequence of government assistance; the super-depletion allowance of 1977; compensation for the new taxes and royalties associated with the NEP in 1980; amendments to the Canadian Business Corporation Act to allow Dome to restrict its sale of shares to Canadians only; bending the rules on calculating Canadian ownership to allow Dome to meet the Petroleum

Incentive Program guidelines; 'grandparenting' Dome from losing its capital-gains, tax-exempt status for share exchanges in the 1981 budget; ordering Petrocan to guarantee a short-term \$100 million loan from a consortium of banks to enable Dome Canada to buy Canmar in 1982; assistance to CN Marine in return for their accepting the bid of a Dome subsidiary in ferry construction and a rollback on union wages; and a rescue package to a Dome subsidiary, Cyprus Anvil Mines.

Dome's current financial plight was also preceded by a risky, aggressive expansion and takeover program. The program certainly was facilitated by the support of bankers and the previously mentioned government assistance, but it was also prompted by the need to satisfy other government-imposed constraints (e.g., Canadian-ownership requirements to be eligible for government-support programs, especially those associated with the National Energy Program). Much of Dome's management and resources appear to have been devoted to financing and refinancing arrangements largely in response to government subsidies or regulation (designed in turn to foster such objectives as Canadianization, Northern development, and energy self-sufficiency) with little regard for the ultimate commercial viability of the undertakings. This expansion program did more than drain Dome's managerial and other resources. It saddled them with an immense debt (ten times that of Imperial Oil with the same asset base), at short-term variable interest rates during a period when interest rates were skyrocketing and energy prices were plummeting. One wonders if such a risky debt position would ever have been undertaken by Dome (and encouraged by the banks) if there was not this history of government support and the pursuit of objectives that the parties felt the government would ultimately support. This may account for the heavy risk exposure of Canadian banks in Dome and in the oil industry in general; the latter represents 10 per cent of all bank business loans by 1981, up from 5 per cent in 1978.

With respect to the labour market, certainly a substantial number of Dome's 10,000 employees (mostly in Western Canada) would have been affected by a bankruptcy. However, employment opportunities in the energy industry are constantly in a state of flux and some of the workers would have been absorbed elsewhere as Dome's market was picked up by other producers. If they would not have been employed elsewhere, it would have indicated the depressed state of the market; continued employment at a 'bailed out' Dome would mean workers elsewhere would

not be employed. Even if substantial adjustment costs would have been involved, many of the employees were highly paid (over \$6,000 per month in 1980 for a driller in the Beaufort Sea). Some of this presumably reflects a compensating wage for fluctuating and uncertain job opportunity. Their substantial pay position relative to their alternatives is evidenced by the fact that in 1982 Dome employees engaged in concession bargaining by taking a reduction in pay (10 per cent) and benefits and an increased work week.

Any equity rationale could not be based on the disadvantaged economic position of the workforce. The rationale would have to rely on the facts that approximately 20 per cent of the Beaufort Sea workers were Eskimos and that many Dome employees were also Dome shareholders and homeowners in Calgary whose stock and housing prices were also plummeting. (However, this was occurring irrespective of the bailout proposal.) Even if a bailout could alleviate their economic position it is not clear that it would be justifiable on equity grounds to support workers who have sufficient income to invest in stocks in a nondiversified fashion (i.e., in the company where the return to their human capital is also tied up). It may make more economic sense for companies in one-industry boom towns to also provide housing with the risk diversification occurring through the stock market. It also highlights the fact that while policies to encourage employee stock ownership may improve worker incentives since they have a greater financial stake in the company, they do not provide a diversified portfolio because both the human and financial capital of workers are tied to one source – their employer.

Would there have been an inappropriate bankruptcy and liquidation of Dome or would the capital market have led to a restructuring of claims and continued operations, albeit on a more reduced scale? Given the substantial costs of liquidation of all the Dome assets, it is unlikely that a full-scale liquidation would have resulted without government assistance. More likely the outstanding debt would have been reduced by a sale of some of Dome's assets. The restructured firm would have lower interest payments, a lower debt ratio, and lengthened maturity of the existing debt. To the extent that some new investments were necessary, new equity funding would have had to be found. The net result of the restructuring would be wealth losses to all investors with the ultimate risk-bearers being the common equity holders faced with a very small return.

With the benefit of hindsight, it can be seen that the observed behaviour of the creditors is consistent with the expectations that liquidation would not occur. A number of deadlines had been set by creditors to force Dome to make principal payments. Each deadline passed and no bankruptcy occurred. There had been a sale of assets and new management. Thus, even though the company is in default on its debt payments, the creditors' wealth is higher under its current strategy than it would have been with a forced liquidation.

In September 1982 an 'Agreement in Principle' (AIP) was announced which specified the terms under which the bailout would take place. Convertible debentures worth \$1.5 billion were to be issued; the interest rate was set at 1 per cent above prime; and interest payments were to be made in common shares. Of the total issue, one-third was to be taken up by the federal government, one-third by the Canadian banks, and one-third sold by existing shareholders. The banks also would reschedule their outstanding debt postponing its maturity up to ten years.

To the extent that Dome could be 'turned around' the conversions of the debt into equity would result in a substantial dilution in the ownership of the existing shareholders. Based on the AIP, effective control of the firm would go to the federal government and the banks: The AIP resembles a private refinancing except that instead of new equity funds being obtained, the federal government has stepped in and purchased convertible debentures.

The AIP encountered stiff opposition from the common shareholders who were upset at the extent of the dilution in their holdings; hence it has not been implemented. In that vein, the AIP might be interpreted as a catalyst to encourage a financial reorganization. On 1 December 1983, Dome's new management presented a revised plan aimed at achieving a compromise among the firm's creditors. Dome's creditors have had difficulty reaching agreement, primarily because of the substantial differences in the banks' relative exposure to the risk of default and liquidation. The Citibank consortium is well secured; some Canadian and foreign banks are not. Earlier (1980), when Dome required additional credit to purchase the remaining 48 per cent of the shares in Hudson's Bay Oil and Gas (HBOG), the Canadian banks relinquished their HBOG equity security in order to induce the Citibank consortium to provide the required financing. In the fall of 1984, PC finance minister Michael Wilson announced that the government would no longer be a party to the proposed bailout scheme.

On 5 February 1985, Dome and its lenders worked out a twelve-year restructuring of Dome's debt, which at this date was \$5.3 billion. Although the details of the restructuring have not yet been made public, plans were announced to reschedule repayment of principal until 1988 for \$3.6 billion of the total debt.

Dome's costs have been falling and assets are being sold. In the Dome case, the scope for strategic behaviour among creditors is limited because the difference between the value of the assets disposed of on a piecemeal basis and the value of the assets as currently organized seems to be small. As a result, a holdout threat to put the company into liquidation would not entail any substantial detriment to the other creditors because their claims would be largely unaffected by a liquidation. On the other hand, going-concern value could exist in Dome's joint ventures with other oil companies; it might be costly to transfer these rights to a new owner. Dome is viable, but substantial concern still exists over the risk of increases in interest rates and falling oil prices.

The threatened bankruptcy of Dome in 1982, if it had materialized, would have had considerable political costs for the Trudeau government. The dislocation of some 10,000 Dome workers and the bankruptcies of Dome's suppliers would pose a strong incentive for any government to head off Dome's failure. As one of the three majors in the Canadian-owned energy sector and one of the key potential frontier-oil producers, Dome's demise would adversely affect many segments of the sagging oil and gas industry. However, the political significance of a failing Dome goes far beyond its direct impact on the workforce and the energy sector; Dome was a primary vehicle for the implementation of the energy policies that were the foundation of the Liberal electoral strategy. In 1980 when the Liberals swept back into power after the Clark interregnum, that victory was in part made possible by their carrying most of the twenty-three marginal ridings in Ontario which they had lost in 1979. Energy was a significant issue during that campaign and the appeal to Toronto voters of the Liberal's energy stance was no doubt central to the electoral outcome (Doern and Toner 1985).

In October 1980, the National Energy Program paved the way for a major federal presence in the energy sector. Two elements that were critical to the program, Canadianization of the resource sector and exploration of the federally owned frontier lands, could not be achieved without some co-operation from the industry. Dome was the single most important private-sector firm to provide that support. Dome rushed in to

take up the incentives put forward by Ottawa. The relationship was symbiotic. The federal government facilitated Dome's Canadianization and frontier exploration with tax, regulatory and subsidy instruments. Dome was treated as a model company, demonstrating what can be done to mould the energy sector to benefit Canada.

When Dome's situation became precarious, the material and symbolic implications were painfully clear. The failure of the firm that had played the role of chosen instrument would not only have serious consequences for other parts of the industry, it would also send out a number of signals harmful to the Liberal government's image. The failure of Dome would carry the message that the National Energy Program was detrimental to Canada's energy sector. The failure of Dome would stand as a visible monument to the failure of Canadianization. Dome's bankruptcy would reduce the viability of one of the Liberal's central policy objectives and in so doing destroy a major source of Liberal appeal to a key constituency, Ontario voters. Any orderly deployment of Dome's assets after bankruptcy, particularly if acquired by foreign-based oil companies would in no way compensate for the loss of this symbol of Liberal policy.

Pressure to prevent Dome's bankruptcy also came from the Canadian banking system. Estimated Canadian-dollar bank loans from the big four banks to Dome was over \$3 billion. After the loan for HBOG, the total indebtedness was about \$4 billion. The Canadian Imperial Bank of Commerce had the greatest exposure. When Dome took up the National Energy Program's incentives, it had no difficulty obtaining bank loans (*ibid.* 1985, 353; Foster 1983). The potential profits from pursuing National Energy Program-induced takeovers was an attractive proposition to the banks as well as Dome. When interest rates and Dome's debts rose, several of the banks stood to be adversely affected. To some extent, Ottawa's repeated support for Dome and Dome's willingness to act as a chosen instrument (obviously to its benefit) contributed to a situation in which the bank loans became an unreasonably large lending commitment relative to Dome's capital and the interest rate may not have reflected the loan's risk given Dome's capital structure, profitability, and risk. In other words, noneconomic factors may have influenced the banks' financial management.

It was not in the government's interests for the banks to bear the costs of Dome's demise for two reasons. First, it might promote a public crisis of confidence in the banking system, and second, given that some part of the banks' behaviour was induced by government signals, in the future

the banks would be less receptive to playing other policy-facilitating roles. The use of moral suasion to influence the banks' lending activities in pursuit of government policy objectives would be seriously undermined if the banks were left to bear policy risk (Fulton and Stanbury 1984). Clearly it would be rational for the government to disperse the costs on to the taxpayers to whom they would be far less salient.

Dome's failure confronted Liberal policy makers with a threat to their electoral fortunes and to their relationship with the financial system. Although it would have been politically very costly for Ottawa to stand by and allow Dome to go bankrupt, the government could not appear simply to be pouring money into a firm so that it could continue to reap resource rents. As in the next case of the Atlantic fisheries, there was some pressure for the government to 'get something for its money'.

Unlike the fisheries, monitoring costs and policy co-ordination objectives were not particularly important to Dome's case. The objective was to help Dome survive, not to direct its actions. The Agreement in Principle (AIP) entailing the equity participation of the Government of Canada acted as a kind of backstop, guaranteeing at least one circumstance in which Dome could survive. The AIP provided an incentive for the lenders to work out their best deal knowing bankruptcy was not imminent. The financial reorganization undertaken in February 1985 provides for Dome's survival without Ottawa taking up any equity in the firm. Although the Liberals could not afford to have Dome fail, the terms of survival offered by the government created a strong incentive for private-sector interests to provide the bailout.

Atlantic fisheries

Recent problems of the Atlantic fisheries processing and fishing operations stem in part from an overexpansion in the late 1970s generated by the Canadian extension of its offshore economic zone. The extension led to high debts at a time of escalating interest rates and operating costs. This, in turn, led to a number of federal and provincial bailouts in the form of loan guarantees for some specific companies, and the takeover of one company to form a crown corporation. These problems are highlighted in a financial analysis of one of the major players in the restructuring, National Sea Products Limited. Since 1980, the company displayed poor profitability, inadequate liquidity, and high-leverage

(and low coverage) ratios. Based on a statistical model, it was classified as bankrupt for the years 1980 to 1983.

These financial problems and the need for economic rationalization led to the appointment of a federal task force chaired by Michael Kirby. After numerous federal-provincial jurisdictional disputes and legal battles, the parties agreed to a re-organization of the Atlantic fisheries industry (as opposed to the continuance of the policy of *ad hoc* bailouts of specific firms). The reorganization took the form of two separate mergers, one creating a Nova Scotia company and the other a Newfoundland company. The Newfoundland company (Fishery Products International) is under predominantly public ownership (mainly federal) with some bank and employee involvement, while Nova Scotia's National Sea Products is largely privately owned. Interestingly enough, the reorganization led to complaints from both the private independent fisheries in the Atlantic region and the US government (representing American fisheries) on the grounds that they would have to compete against government-subsidized operations.

The stated rationale for government intervention hinged on the preservation of jobs, especially in communities that were almost completely dependent on the fishing industry. The alternative, at least in the short run, would have been considerable unemployment with government support through transfers and increased public expenditure. Reorganization as predominantly publicly owned companies (at least until the shares could be sold privately) was seen as preferable to the continued bailout of otherwise private companies.

Whether these stated rationales have much validity on narrow economic grounds is also open to question. With respect to labour-market issues, it is true that plant closings and layoffs would have occurred under private-sector reorganization in a period and in communities where unemployment was already so high that adjustments would have been substantial. However, this economic restructuring has to be viewed in the larger context of the depressed Atlantic economy. Then the real question becomes: are bailouts or reorganization of the fishing industry under public auspices the best way to ensure the viability of jobs in the long run? Or do either of these instruments only discourage longer-run viability obtainable through the marginal adjustments of attrition, reduced new entry, and ultimate diversification into new jobs? The problem is unlikely to be a temporary one which will disappear if the

economy recovers. Downsizing has occurred only slowly; few plants have yet been closed.

The questionable long-term viability of the newly created entities is underscored by the significant use of equity financing by the governments involved in the bailout. By using equity they have given a signal to the capital markets that they are in the bailout for the long term. Further, the government provided \$53 million of equity to FPI which instead of being used as operating capital, was used to reduce the company's indebtedness to the Bank of Nova Scotia.

With respect to possible capital-market failures, there is no obvious economic rationale for intervention. To the extent that it was efficient from an economic perspective, the amalgamation that occurred under government ownership could have occurred through private-sector merger activity. The outcome most likely would have been different (e.g., more downsizing and plant closings); nevertheless, this would reflect the market's assessment of the optimal structure of this industry. It is unlikely, given the viability of independent operators and foreign competition, that private-sector mergers would have led to any natural monopoly problem through single-firm dominance.

The capital market's willingness to support the earlier industry expansion associated with the extension of fishery rights suggests that the capital markets certainly are willing to support what *ex ante* appears to be a profitable venture. *Ex post*, overexpansion is always a possibility, leading to the inevitable need for a 'shakeout'. Unfortunately, such downsizing has labour-market consequences that are probably easier to accept when they occur in a dynamic, new, growing industry (like computers and microtechnology) rather than a declining industry like fishing where alternative jobs are not always available.

Strategic behaviour in the insolvency bargain does not appear to have been a major problem in this case. Rather, the decision of private creditors to withdraw their continued support seems to have been a rational response to the perceived long-run viability of the industry as it was then structured. The strategic behaviour seemed to occur more at the political level, with the various parties engaging in threats, counter-threats, formal negotiations and media manoeuvring.

The previous discussion suggests that there were few narrow economic arguments for support for the Atlantic fisheries. To reiterate what Premier Peckford said: 'if the federal government decides to solve the fisheries problem on the basis of "raw economics", then Newfoundland

might as well close up shop and steal away'. It appears that political rather than economic factors dominate in this case, albeit the economic case should be viewed in the larger picture of the appropriate amount of and form of federal assistance to the Atlantic provinces in general.

The political rationale

The political case for bailing out the Atlantic fisheries (or more specifically the major firms in the fish-processing industry), rests on a number of by-now familiar factors: the massive employment dislocations likely to result from bankruptcy, the centrality of the industry and its jobs for the Atlantic economy, the number of communities dependent solely on the fishing industry for their existence and the implications for the health of the industry of the federal government's general objective of reducing regional disparities. The fisheries are more than one of the largest sectors of employment in the Atlantic provinces; for some parts of the region they are the *only* major source of employment. The development of the Atlantic provinces is unlikely to occur without a viable fishing industry.

The basic problem for the fisheries industry – overcapacity – is inherent in the nature of a common-property resource (McCorquodale 1983). This problem is exacerbated by a weak economy in which the fisheries has become the employer of last resort (Weeks and Mazany 1983). Demands by Atlantic voters for jobs and higher incomes have resulted in fisheries policies that are as much social as economic. The various forms of subsidies to preserve employment and augment low incomes in the fisheries have added to the overcapacity problem. In 1955 the federal government passed legislation providing for loan guarantees for virtually any fishing operation. The Fisheries Development Act (1967) provided for payments for construction, modification, conversion and equipment of fishing vessels. Although excess capacity in the processing sector was an acknowledged problem, the Department of Regional Industrial Expansion (DREE) encouraged the development of fish-processing plants as a means of providing employment. Starting in 1957, liberalization of unemployment-insurance benefits, through inclusion of self-employed fisherman and later regional differentials, maintained more individuals in the industry (Economic Council of Canada 1980). In 1961 government support accounted for 65 per cent of the total income generated by fishing and fish-processing in Newfoundland (Copes

1974). By 1974, overcapacity, declining fish prices, high energy prices and interest rates resulted in a crisis for the entire industry. The federal government responded with subsidies of over \$130 million to stave off widespread bankruptcies.

The 1977 extension of the Canadian fishing jurisdiction to the 200-mile limit promised a way out of the problems. Increased fishing stock and larger catches portended benefits for the entire industry. It all too quickly became apparent that more fish meant neither more jobs nor more income; it did however mean more fisherman and expansion of companies beyond their management capabilities (Munro 1980). By 1980 the industry was in a state of crisis once again. As the economy deteriorated, the social role of the fisheries became all the more crucial. Impending failures in the processing sector were the immediate problems that precipitated a reconsideration of federal fisheries policy through the establishment of the Kirby Task Force. The bailout of the processing companies flowed from the recommendations of the Kirby Task Force. The rescue instrument was designed through negotiations among the federal government, Newfoundland and Nova Scotia, the banks and the firms' shareholders.

This latest round in government assistance to the fisheries appears to be shaped by the social, cultural, and economic concerns that have traditionally made Atlantic fishing interests a salient political problem. There are, however, at least three aspects of the 1982-83 bailouts that represent distinct breaks with the past as well as a contrast with our other cases.

Both the scope and the objectives of the fisheries bailout were broader than in other recent Canadian rescues. Although the sectoral approach has not been the dominant strand in Canada's policies toward economic change (Trebilcock 1985), the dominant perspective on the problem of fisheries was on an ailing sector rather than an individual firm. The objectives of the federal government also reflected a more encompassing perspective. In most of the other recent rescues the benefits were provided to narrowly defined interests, often at the expense of adjustment. The fisheries bailout was predicated on an explicit concern with economic efficiency and growth objectives (albeit tempered by a 'social orientation') that is at odds with earlier policy responses by Ottawa. Finally the choice of instrument is of interest. It reveals a complex political-influence function which resulted in the creation of mixed

enterprises in a marked deviation from past policy responses that sought to subsidize private firms.

The sectoral approach that appeared to inform this most recent fisheries bailout can be traced to several factors not the least of which is the apparent failure of early narrow efforts. The inextricable interweaving of the various elements in industry make it apparent that one part cannot be dealt with without considering effects on other parts of the industry. The very marginality of most of the industry means it takes very little to affect seriously the incentives of the interdependent units. Fisheries is unique in the extent to which a large proportion of individuals and communities depend solely on the industry. Any policy response that looks to do more than maintain the status quo must take this social role into account.

The change in federal perspective, to a more encompassing view in which fisheries was to be made more a business and less a vehicle for social policy, derived from several factors. Past failures no doubt exposed the high costs and few benefits of the *ad hoc* subsidy route. When the extension of the fisheries to 200 miles failed to contribute to the viability of the industry it made it harder to ignore the sources of failure was not within the management. Analyses from the Ministry of Fisheries and Oceans (1981) and the Economic Council of Canada (1980) foreshadowed the forceful message of the Kirby Task Force: the fisheries could best serve the region if the industry were run on economic principles. The question of state intervention or the continuation of some form of assistance to the fisheries was not really at issue (Kirby 1984). What the Kirby Task Force and later the negotiating team tried to do was to tilt the use of funding more toward the objective of economic viability.

The interests of the federal and provincial governments have been characterized as two competing visions of the fisheries – one economic and one social. Much of the difference in perspective is based on differences in the electoral constituencies of the two levels of government or, more precisely, their respective concerns for the cost bearers. The costs of the assistance to the fisheries would be borne by the Canadian taxpayers. Ottawa could more easily impose the large initial costs if there were important symbolic justifications. Receiving some equity was no doubt preferable to further subsidies of private-sector firms. But most importantly the economic assistance could be hailed as more than another subsidy to increase the dependence of the Atlantic provinces; it

could be seen as something constructive to help the area stand on its own feet.

For the Peckford government, the effect on the bearers of those costs that were externalized to the rest of Canada was of little concern. It was the local cost bearers that concerned them – those who would bear the transitional adjustment costs through plant closures. The 'social vision' and the 'all plants open' campaign reflected the importance of those voters for the Government of Newfoundland. In addition, since it was clear that the federal government would not walk away from the failing sector and that some form of aid would be forthcoming, it was in Newfoundland's interest to take a strongly protective position as a way of claiming credit for extracting federal money.

The choice of instrument for the fisheries bailouts consisted of two enterprises – one in which the federal and Newfoundland governments controlled 85 per cent of the shares and the other in Nova Scotia in which the federal government financed 65 per cent of the enterprise but controlled only 20 per cent of the equity. Although it is alleged that Ottawa sought private-sector owners for the restructured companies, there are several reasons why state enterprise was an attractive policy response. There is a substantial federal interest in the survival of fish processing in the Atlantic provinces. This concern reduces the incentives of any private owners to monitor the firm effectively; they can be sure that government cannot allow the industry to disappear. The desire of the government to run the fisheries as both a business and social-policy vehicle required continuing trade offs and policy co-ordination that might be more effectively implemented by a crown corporation than a regulated private firm (Trebilcock and Prichard 1983). Moreover, the expected continuing costs to the taxpayer of the restructured firms would be less visible within the structure of public ownership. A publicly owned processing plant was also the preferred solution for the Newfoundland government, but for somewhat different reasons. It would provide the best vehicle for continued transfers to Newfoundland fishermen from the rest of Canada. Social-policy objectives and low-visibility taxation could be more easily achieved by a public firm than a privately owned company. Labour interests also recognized the benefits of a government-owned company. Currently they are pressing the federal government to increase its subsidy to FPL in order to allow the company to pay higher wages and prices for fish.

For Nova Scotia, a publicly (meaning federally) controlled processing company was not a desired outcome. Nova Scotia feared that one large publicly-owned regional processing firm would result in the relatively healthy Nova Scotia fishery subsidizing the more distressed industry in Newfoundland. Nova Scotia sought private-sector investors for the rescue in order to preclude a strong federal presence in the Nova Scotia fisheries. It was agreed in Nova Scotia that Ottawa could not combine its role as owner of the new fish-processing company with the responsibility of an impartial regulator of the resource (Pross 1984, 102). It was feared that a large federally-owned processing firm would operate to the detriment of other interests in the Nova Scotia fishery. Nova Scotia was less concerned than Newfoundland with assuring the integration of noneconomical policy objectives into the company. In seeking what was described somewhat incorrectly as a private-sector solution, the province negotiated for an arrangement in which Ottawa had only 20 per cent of the company although its financial contribution was more substantial. To date, the two provinces predicted correctly. The Newfoundland company has not moved to close down any plants – it has received an additional \$25 million in federal loan guarantees – and anticipates the need for another \$100 million in government assistance. The Nova Scotia firm, National Sea, has been able to streamline its operation and has shut down one plant and sold two others.

SOME GENERALIZATIONS: ECONOMIC

Clearly, the numerous case studies illustrate the range of issues involved in deciding whether or not a bailout is justified economically on the grounds of possible failures in labour, capital, or bankruptcy markets. Most of the firms in question appeared to be suffering from general economic problems associated with the economy and with their industry (e.g., recession, shrinking markets, foreign competition, high interest rates) as well as problems associated with their particular firm (e.g., unusually high debt ratio and labour costs, managerial mistakes). In addition many had a long history of government support in a variety of forms. Many had embarked earlier on aggressive expansion programs, often assisted by government support. Such action often left the firms with a high debt position at a time of high interest rates and a severe and prolonged recession.

Many of the organizations were also family owned or operated or reliant on particular individuals who seemed heavily responsible for the affairs of the company. In addition, one Canadian bank – the CIBC – was involved exclusively or heavily in an unusually large number of the cases. It seems that the CIBC had backed a disproportionate number of the risky expansion programs that led to possible default and as a bank had much to lose if bailouts were not forthcoming and private restructuring or bankruptcy ensued.

With respect to the ultimate economic success of the bailouts, the picture is varied. Some like Electrohome, Coop Implements and Chrysler appear to have been turned around; the extent to which that would have occurred without the bailout is unknown. Others like Canadair, Minaki Lodge, and Whistler seem to entail endless successions of 'putting good money after bad' and would have to be justified on other than economic grounds. In these cases political or other noneconomic considerations tend to loom large and, not surprisingly, they involved the most pressing need for bailout assistance. Others, like Maislin, CCI, and White Farm, were eventually allowed to go into receivership; Dome and Massey are still functioning but with an uncertain future.

The resulting economic health of an organization is not sufficient criteria to judge a bailout from the perspective of economic rationales. The results may have occurred without the bailout and in fact the bailout of specific firms may have prevented an eventual reorganization and improved economic viability of the industry. The bailout may have other long-run consequences: encouraging excessive risk-taking or discouraging the concession bargaining that may be necessary for the industry to compete.

Labour-market failures

The two potential labour-market failures that seem most relevant in justifying bailouts are: alleviation of the adjustment costs and the associated government transfer payments or postponement of them to a time when they could be better absorbed by the economy; and alleviation of any 'congestion' externalities associated with mass layoffs in a specific community. Even if the bailout simply 'bought time' and the workers were eventually displaced they may have had additional time to adjust in a marginal fashion (e.g., through attrition, voluntary quits, reduced entry) rather than in the 'lumpy' fashion that may occur with unan-

anticipated bankruptcy. The extent to which bailouts, once they are anticipated, mitigate or exacerbate the adjustment costs is still unknown.

Bailouts may also alleviate the possible congestion externalities of mass layoffs that could occur with a bankruptcy. Such layoffs are more likely to impose costs on other unemployed job-seekers when they are large relative to the size of the local labour market; when the economy is in a state of recession and the surrounding communities and related industries also in a depressed state; when the workers are fairly homogeneous in terms of their skills; and when they are likely to enter the pool of unemployed job-seekers rather than leave the labour market for other alternative activities like retirement, household work, or school.

In our particular case studies, justifying a bailout to alleviate adjustment costs or prevent possible congestion externalities in the labour market seems to apply only to White Farm Equipment and Massey Ferguson in Brantford, to Chrysler in Windsor, and possibly to the Atlantic fisheries case. Even in cases such as these it is not possible that if bailouts become anticipated they can have long-run effects that exacerbate the adjustment costs and prevent diversification and wage adjustments that mitigate the possible congestion externalities.

Capital-market failures

Arguments based on possible capital-market failures seem even weaker. The case studies provide considerable evidence that the capital markets would support organizations whose problems could be regarded as transitory; for those with permanent problems, the assets could be redeployed presumably in their highest-valued use. There was also evidence to indicate that the capital market clearly rejected projects where government had a vested interest (e.g., energy self-sufficiency, the promotion of tourism and high-tech development, the encouragement of exports, and Canadianization). Indeed, many of the bailouts occurred in situations where the capital markets were subject to noneconomic constraints and were not allowed to operate freely. In those situations that ended in insolvency, the capital markets seemed capable of redeploying those assets that had a value-in-use and the insolvency arrangements appeared to proceed in an orderly fashion.

In many instances the governments providing assistance were aware of the problems of strategic behaviour by management as the agent of equity holders once a loan guarantee was in place. To prevent excessive

risk-taking the government along with the banks undertook monitoring through the request for periodic financial statements, a presence on the board of directors and constraints on certain decisions under trust-indenture restrictions. In addition, a number of loan-guarantee agreements (Maislin, Electrohome) included the option to purchase common-equity securities. These options are taken as compensation for risk bearing and have the result of transferring some of the wealth gains due to the bailout away from the equity holders. An additional benefit is that the common equity holders will have to share with the government any wealth gains obtained by strategic behaviour relative to the bondholders; the smaller pay off from this behaviour will reduce the incentive to undertake it. In the proposed bailout of Dome, the federal government would have taken convertible debentures which, being convertible into equity, had the same impact on strategic behaviour as a loan guarantee *cum* equity option.

If the government decides that a bailout must be undertaken, provisions (which include common-equity participation contingent on the success of the performance of the firm) should be a part of the assistance package. The terms of support with equity options must be set carefully; if equity entitlements are too large the existing equity holders bear the cost and will be unwilling to accept the proposal (which may arguably be desirable if this leads to private restructuring). This is consistent with the observed behaviour of the common equity holders in the proposed Dome bailout. Finally, after exercising their options, the government should liquidate its common equity of the company. To the extent that the government holds a common-equity position, investors may expect that a future or continuing bailout is possible.

Bankruptcy-market failures

Strategic behaviour in the insolvency bargain was reflected in a number of cases where there were a diverse number of creditors with different exposure levels and hence were subject to the possible risk of one creditor prematurely putting the firm into bankruptcy, denying the other creditors an opportunity to react. Nevertheless, this possibility was only suggested in two of the cases – Dome and Chrysler. In fact, most creditors seemed to strongly want to avoid bankruptcy given the delays and transactions costs involved and when bailout arrangements were made the co-operation of the creditors did not seem a major obstacle.

Programmatic bailouts under the EDP

A case study which differs from the others is the one concerning restructuring of firms under the Enterprise Development Program (EDP) and the Bankruptcy Act. Given the criteria for inclusion in the EDP sample, these firms represent programmatic bailouts; the latter set of companies represents the capital-market response to default.

The results of analysis in this case are consistent with the conclusions drawn from analysis of the other case studies. Companies receiving EDP assistance were in serious financial trouble; this was displayed by poor liquidity ratios and proposed uses of funds which included working-capital enhancement and repayment of outstanding liabilities. The deteriorated financial position of the firm was consistent with the use of the EDP as a lender of last resort. However, reasons advanced for providing assistance did not include providing aid to companies that were likely to prove viable in the long run but were unable to obtain funds. Instead attention was focused on employment issues.

The alternative strategy of a bailout is to permit the market to operate, which sometimes leads to proposals under the Bankruptcy Act. A comparison of the companies receiving EDP assistance and those submitting proposals uncovers a number of striking features: the companies submitting proposals are much newer, much smaller (in terms of assets), but in 'better' financial health (e.g., higher liquidation value of assets).

Finally, a comparison of the financial characteristics of accepted and rejected proposals provides some tentative evidence on the operation of the capital market. Characteristics which reduced the risk of payment to unsecured creditors were related to proposal acceptance; these factors include length of time until proposed payment to creditors, continuation of government financial assistance, and the ratio of liabilities to the liquidation value of assets. These results are consistent with a market operating efficiently for the redeployment of assets.

In essence, the case supporting bailouts for economic reasons would have to rest on the possibility of the labour-market failure to adequately deal with adjustment costs and the possibility of congestion externalities. These situations are usually associated with mass layoffs in otherwise depressed communities. However, this is an 'uneasy case' and is not particularly relevant to most of the case studies. It appears that in a

substantial number of cases one has to go beyond economic reasons to explain why bailouts did or should occur.

SOME GENERALIZATIONS: POLITICAL

Since the early 1970s, Canadians have no longer been able to look to dramatic rates of economic growth for resolution of conflicts over the distribution of the national product. In the light of increasing competitive pressures and economic insecurity, many groups have turned to the state to protect their economic position and reduce market risk (Courchene 1982; Hartle 1983). As indicated in Chapters 2 and 7, the structural features of Canada's political economy have imposed little counterweight to those seeking protection. Fragmented organizations within the private sector are unlikely to calculate policy costs and benefits on a national scale. The diffusion of decision-making responsibilities across a number of state agencies allows narrowly defined interests to become key political constituencies.

Although these structural characteristics may appear to shape a general propensity to deploy protectionist policies for narrow interests, the explanation of particular firm-specific subsidies requires closer analysis of the political process. Which variables explain the pattern of assistance revealed in the case studies? Economic arguments based on market failure do not provide convincing rationales for many contemporary Canadian bailouts. Their diversity precludes justifications based on any overarching industrial strategy. However the political-supply function derived from the public-choice framework links policy outcomes to their net political benefits. Locating each case within that framework, this discussion has focused on the political factors that engendered concentrated benefits to marginal voters, and low visibility, dispersed costs to inframarginal voters, as well as symbolic benefits and reassurances for widely dispersed groups of voters and cost bearers.

Beneath the stylized facts of each rescue the case studies contain a number of common elements. The bailouts involve three sets of variables. First, the decision to rescue is driven primarily by the distribution of material costs and benefits. Secondly, rescue decisions involve the manipulation of symbols that tie the marginal firm to government's central policy objectives. Thirdly, the calculus of policy choice must be considered in light of the incremental nature of the political process. Running like red threads through the cases, these factors

determine the distinctive array of political forces that predictably give rise to decisions to bail out an ailing firm. The political explanation of bailouts is derived from the axiomatic framework depicted in Chapter 7.

Substantive benefits and their costs

Providing concentrated benefits to a group of marginal voters is a fundamental objective of rational political behaviour (Axioms 1 and 2). In the cases of Chrysler, Massey Ferguson, and Canadair, the large concentrations of workers potentially prejudiced by the firm's failure created a political constituency for intervention. The size of the workforce dependent on the firm is not, however, a complete explanation. Even smaller groups of voters can, depending on their location, generate cogent demands for protection. When the workforces are located in a one-firm or one-sector community, the concentrated economic costs of decline forge a significant political constituency.

When the marginal firm and its workforce are in a region that is important to the government's electoral success, decision-makers' sensitivity to those demands for assistance is augmented. In the cases of Cooperative Implements and Minaki, the regional locations of the firms were raised to emphasize that benefits from public policies generally accrued to other, more politically favoured regions. In both of these bailout cases the issue of assistance was turned into a test of the government's concern for the usually 'less favoured' regions.

Although the marginal voter is a central concept in the political framework, the case studies illustrate the need to refine the concept for use as an explanation of business bailouts. The marginality of bailout ridings, defined as a situation in which the plurality of voters is not permanently committed to any particular party, can be assessed in Table 25 above. Marginality of past electoral performance does not appear to be a good predictor of bailouts. In many cases the riding had consistently supported one party. The impression drawn from Table 25 is that the allocation of bailouts is based on patronage rather than vote optimization. Under patronage, federal ridings held by Liberals (in power federally from 1968 to 1979, and 1980 to 1984) would be expected to have a disproportionately larger number of bailouts. Under vote optimization, politicians would be expected to expend scarce resources by favouring those ridings in which there is substantial variability in the electoral outcomes (McNaughton and Winn 1981). While recognizing

that in some cases, Dome and Atlantic fisheries for example, associating the firm with a particular riding may not be particularly appropriate, the results in Table 25 are still quite striking: with the exception of Massey and White Farm the bailouts were all in government-held ridings.

Casting marginality in the terms posed by Axiom 4, as a situation in which the voters' allegiance to a party is contingent on their demands being met, may provide insights into bailout politics. Bailouts differ from DREE grants, highway expenditures and other subsidies in which particular ridings receive seemingly unsolicited gifts. A bailout is a government response to a visible and articulated problem; not to provide the assistance is to say 'no' or to reject explicitly the riding's demands. Thus the basic strategic notion associated with the concept of marginality, that politicians provide transfers where they will induce the greatest political benefits, obtains in the bailout situation. The difference is that *any* riding in which a significant portion of its voters stand to bear large adjustment costs will be perceived by its representative as marginal, regardless of the constituency's previous voting records. The distinction between districts that do or do not receive help may be determined by the extent to which the perceived marginality receives political representation. In several of the bailouts, there was a strong voice in Cabinet to make the case for the rescue and to link the survival of the firm to the electoral success of the governing party. Representation by Cabinet ministers with clout (e.g., Herb Gray [Chrysler], Marc Lalonde [Maislin], Jean Chrétien [Canadair], Lloyd Axworthy [Cooperative Implements], and Leo Bernier [Minaki]) is said to have played an important role in influencing government decisions to intervene. We found no instances of refusal to rescue when a bailout was supported by an important Cabinet minister. Thus it is the *perception* of marginality and its effective representation that is linked to protection.

The political benefits derived from supplying subsidies to concentrated workforces in politically significant locations cannot be assessed without also considering the costs of such assistance. The case studies illustrate policy outcomes totally in keeping with the axiomatic framework. Although the benefits were provided in concentrated form, the costs, usually through loan guarantees, were dispersed, obscured and often postponed until a later date (Axioms 2, 8). In those cases such as Canadair, Dome, and the Atlantic fisheries – where it was impossible to really obscure the very large costs – they were represented to the electorate (cost bearers) as investments to secure such long-term benefits

as high technology, Canadian control over natural resources and the economic development of the Atlantic provinces (Axiom 9).

Symbolic benefits and costs

Material benefits are not the only basis for policy-making. Governments cannot choose only policies that provide highly concentrated benefits because this would yield only a small group of voters from which their party can realize a political return (Axiom 4). Politicians must also be concerned with the many voters not benefiting directly from any particular policy. Those groups of voters, because of their lack of information, are particularly vulnerable to the symbolic outputs of government (Axiom 12). Any relationship between a firm and the government's major policy objectives attaches an important symbolism to the firm's survival. In the cases of CCI and Canadair, the companies were viewed as part of Canada's commitment to a place in the high-technology world. Dome's close association with the NEP significantly enhanced the importance of Dome's survival for the Liberal government. The symbolic importance attached to a firm's survival not only increases the perceived benefits, it can also lessen the perceived costs (Axiom 9). The symbolic justification of actual costs was especially important when the costs grew quite large relative to the number of direct beneficiaries as, for example, in the cases of Minaki and CCI. The symbolism of the rescue instruments can also defray the perceived costs. In those situations in which the government assumed a great deal of the firm's risk (as in the cases of Atlantic fisheries, CCI, or Canadair) by taking some or all of the equity in the firm, the public appeared to be 'getting something for its money'.

In the case studies, the media played a fairly consistent and predictable role in its determination of the public's view of bailout situations (Axiom 14). In cases such as Whistler, Cooperative Farm Implements, CCM, and Chrysler, the coverage appeared to structure the situation into two oversimplified sides. The conflict appeared to be between those who held the position, 'We do not intervene in the market to help corporations' and those who argued, 'We must save the jobs'. For the most part, media coverage contributed little to a constructive consideration of the problem of easing the burden of transition costs while fostering rapid economic adjustment. Instead, the media tended to focus on the short-term and highly visible costs of nonintervention.

The policy process

The case studies illustrate the distinct impact of the policy process in shaping bailout outcomes. Several of the cases started out with funding decisions made in an atmosphere in which time pressure and incomplete information benefited those who sought the assistance. Regardless of what may be in reality ample alternative-employment options, the disruption of a concentrated workforce is *especially* difficult to ignore in such an atmosphere. Once the situation evokes initial assistance, subsequent requests for further assistance are treated within the typical incrementalist policy-making framework; new decisions are based on past actions. One of the most striking characteristics of the bailout cases is the inversion of the concept of sunk costs. For politicians, sunk costs are seed costs. Initial funding establishes a commitment and a clientele that are difficult to ignore. A benefit once conferred is not only difficult to revoke, it also creates a presumption of future assistance. The provincial cases of Whistler and Minaki illustrated the provinces' concern with protecting their earlier investments as did CCI and Canadair at the federal level. It is very difficult for a government to appear to acknowledge an initial policy mistake by terminating a stream of assistance or to be perceived as the agent primarily responsible for the personal hardships associated with a firm's failure if support is terminated. Once the assistance starts, a government becomes a hostage to those it helps. The incentives facing bureaucrats reinforce the pressures on politicians. Clientele effects link the welfare of the agency with the survival of the firms it assists. The success of the firm becomes the agency's success. CCM and CCI are two examples in which bureaucrats tried repeatedly to use a little more assistance to turn failures into successes.

Cases like Canadair and CCI most vividly illustrate an important feature of an incremental policy process. The total level of assistance resulting from a number of interdependent decisions can far exceed the amount of assistance likely to result from a single decision. The result of this incrementalism is that politicians are unlikely to give full weight to the costs of their decisions. The low visibility of the process of extending further assistance adds to the ease of incrementally increasing the government's involvement. In those instances in which the marginal firm became a fully or partially owned state enterprise, e.g., Canadair and Minaki, the opportunities for obscuring the costs were even greater

(Trebilcock and Prichard 1983). Institutional arrangements within the crown corporation mode often can produce limited accountability to government and Parliament. There are thus two important effects of process on rescue outcomes. What are initially perceived as low-cost rescues may be difficult to contain. Decisions to effect such rescues can be the first step in a costly stream of assistance that cannot be terminated except at ever greater political cost. Second, the ease with which costs of rescues can be obscured can ensnare politicians into a stream of seemingly low-cost single decisions that in aggregate are quite visible and politically unattractive.

Instrument choice

The complex political-influence function that determines the decision to intervene also shapes the choice of rescue instrument. The instrument-choice implications yielded by the political-choice model flow from the distributive and procedural qualities of various policy instruments. Given the decision to assist a certain group of voters, rational instrument choice takes into account the timing, visibility, and dispersal of the benefits and costs of assistance. It is in the interests of the government to select rescue instruments that bring visible, immediate, and concentrated benefits. On the other hand, the preferred instrument will disperse and obscure the costs. Based on those criteria, the loan guarantee is a particularly attractive political instrument. Indeed it has been the instrument of choice in most Canadian rescues. Loan guarantees were provided in a programmatic rescue such as Electrohome, tied to equity as in Massey Ferguson, made conditional on investment and/or employment criteria as in Chrysler and White Farm, and used on a continuing basis to keep the company afloat as in CCI or Canadair.

The procedural attributes of policy instruments also affect policy response. Differences in the flexibility, accountability and control afforded by various instruments were influential in a number of cases. Flexibility allows decision-makers to make adjustments in balancing costs and benefits in response to changes in the firm's situation. The weak accountability channels of an instrument help to obscure costs and enhance flexibility. The extent to which the instrument provides an opportunity for government control is especially important when the survival of the marginal firm is of substantial symbolic importance. Such obvious government concern may reduce private incentives to

monitor adequately the efficient performance of the firm. Further, if the firm's importance to government turns on multiple objectives, the crown corporation may be a relatively more effective instrument for facilitating trade offs among objectives and enhancing policy co-ordination (Trebilcock and Prichard 1983).

In most of the case studies, loan guarantees provided both flexibility and attenuated accountability. They did not, however, prove to be a useful vehicle when control was important. (As evidenced in Chrysler and Massey Ferguson, the government has little option but to accept noncompliance with the conditions of assistance.) The public-ownership instrument arose where control was an issue. In cases like Minaki, Whistler, CCI, and Canadair, where the objective of maintaining the firm extended beyond job preservation to various social objectives, influencing the behaviour of private-sector enterprises in pursuit of those objectives was likely to be very costly and to entail objectives that were difficult to specify in advance and to co-ordinate (Trebilcock and Prichard 1983). A second, and related condition which induced government to employ crown ownership as a bailout instrument was the absence of competing firms. In this situation there were no alternative recipients who could receive government support and pursue the objectives of the intervention and there was limited information with which the government could judge the ailing firm's requests for subsidy.

CONCLUSION

Viewing bailouts as the outcome of a strategy that seeks net political benefit not only provides a consistent framework for the explanation of recent Canadian bailouts but also focuses attention on those elements that will drive any future rescues. The policy implications of the political framework are quite distinct from those implied in economic theory. The case for bailouts for economic reasons rests on correcting for somewhat debatable forms of market failure in order to increase allocative efficiency. In contrast, the political case rests on altering the distribution of income to favour politically effective groups (for other policy applications, see Stanbury and Lerner 1984).

In the Canadian institutional setting, which appears to be hospitable to interventions to assist narrowly-defined interests, the explanation of recent bailouts lies in three sets of variables that determine political rationality. First, rational policy choice involves policies that confer

visible and immediate benefits on concentrated groups of marginal voters and impose dispersed and obscured costs on less interested voters. The size and location of the firm are the factors that are most important in determining the groups of beneficiaries and cost bearers. Secondly, rational policy choice involves not only the allocation of material costs and benefits but the distribution of symbolic reassurances which expand perceived benefits and reduce (or justify) perceived costs. If the government attaches some symbolic importance to the firm's survival, then a bailout is more likely. Thirdly, rational policy choice is constrained by the process of policy-making. Initial bailout decisions made under uncertainty, and sometimes in a crisis atmosphere, structure future responses to the firm's requests and reduce the options available to decision-makers.

The cases analysed in this chapter provide ample evidence that bailouts are largely inconsistent with economically efficient resource allocation. But the political system creates strong incentives to intervene to support some marginal firms. If future policies are to be more congruent with wealth-maximizing economic prescriptions, then the political incentives that induce government rescues must be addressed. The cases illustrate that politicians, in making their policy calculations, weigh the shorter-run benefits more heavily than long-term costs. The question is how to render both private and political actors more sensitive to the full economic consequences of bailout policies.

Bailouts in a comparative setting

INTRODUCTION

This chapter surveys and compares the policy responses of five advanced industrialized nations – Britain, France, Japan, the United States, and West Germany – to the problems of enterprise failure and industrial decline. At the macro level of analysis, the following discussion attempts to assess the incidence of bailouts among these five countries. During the past decade, Britain, France and, to a lesser extent, Japan have frequently granted subsidies to insolvent businesses, while the United States and West Germany have rarely done so. This part of the study builds on the political explanations presented in an earlier chapter in an effort to explain why some nations choose bailout policies more frequently than others.

The incidence of bailouts is, however, not the most important question for industrial policy makers. Assuming that economic efficiency, in the sense of national wealth maximization, is a primary objective and normative benchmark for industrial policy, we need to investigate both the purposes and consequences of bailouts in the five nations surveyed here. A cross-national examination of bailouts indicates that countries grant aid to insolvent firms for two different purposes. Some nations, such as Japan and France, have used bailouts as a lever for facilitating adjustment to market changes, while others, notably Britain, have employed bailouts to block or delay market-induced shifts in the allocation of labour and capital. This chapter argues that certain structural differences in the political and economic institutions of these

five countries provide a partial explanation for the observed differences in their bailout policies.

ECONOMIC PERFORMANCE COMPARED

Comparative analysis is most illuminating when the subjects for comparison, and the environmental conditions to which they must respond, are broadly similar. The political and economic institutions of the five countries discussed in this chapter have many structural similarities; moreover, these nations were chosen as subjects for study because their respective institutional arrangements seem to provide general contexts for economic policy-making that resemble the Canadian context. Canada and the other five political communities considered in this chapter all possess representative forms of democracy, mass political parties and well-established patterns of interest-group organization. The economics of all six nations are predominantly market-based, have similar structural divisions by type of economic activity and employ similar technologies. In addition, since the early 1970s, the six have had to contend with very similar economic problems. During the past ten years, the North American, West European and Japanese economies have all shifted toward both slower growth and greater exposure to international trade. The intensification of competition from external sources and from the introduction of new technology have increased pressures for structural adjustment and hastened the decline of key industries in all seven nations (i.e., steel, shipbuilding, textiles and apparel, and chemicals). The slowdown in economic growth since the early 1970s has exacerbated the adjustment problems of all six nations: the new industries that arise to replace those in decline have been unable to expand quickly enough to absorb displaced employees. Moreover, all six nations have been plagued by rapid inflation since 1973-74, and have employed restrictive monetary and fiscal policies that have slowed the rate of new investment – a crucial lubricant of the adjustment process.

Despite their institutional similarities, and the fact that all six countries must contend increasingly with the same basic set of economic opportunities and constraints, there have been significant differences in the performance of the six economies discussed in this chapter. First, while all six countries have experienced sharp declines in their economic growth rates over the past decade, some countries have consistently outperformed the others. (By economic growth we mean the increase over

time in the value of goods and services produced per capita.) There are a number of technical problems with the use of per capita GNP as the basic measure of growth, and deeper questions about the relationship between growth and individual welfare (Nelson 1980). However, it seems clear that most citizens in these six countries place high value on rising living standards conventionally defined, which to be achieved require the growth of GNP per capita. During the period of 1973-80, the average rate of increase in GNP per capita for each of the six countries was as shown in Table 26.

The data on growth in the period 1963-73 indicate the substantial decrease in growth rates after 1973; they also underline the fact that, apart from the notable exception of Canada, the basic rank order of performance among the six countries was the same in both decades. A large number of factors enter into growth of GNP per capita. Change over time in the fraction of population in the workforce, the employment rate, and average hours worked per week or per year obviously are important causal factors. But over the long run, growth has been largely the consequence of increase in product per hour worked. For the period 1973-82, the six countries attained the average rates of productivity growth in their manufacturing industries shown in Table 27.

These data on growth and productivity establish the superior performance of the Japanese and Western European economies over the last twenty years, and have inspired a substantial amount of theorizing about why the North American and British economies have been lagging behind. Since growth and productivity are the outcomes of many complex processes, it should not be surprising that one writer recently identified twenty plausible explanations for these international performance differences (Denison 1979). No one has made much progress toward specifying the relative causal contributions of the factors or conditions which determine the pace of technical advance and material progress, but most writers agree that two complementary factors are necessary for rapid economic growth. First, there must be high rates of new investment in physical and human capital, including fundamental research and new applications. And secondly, the community's political and economic institutions must facilitate the structural adjustments required to shift labour and capital into more highly valued uses. Most of the evidence indicates that the levels of capital investment, in both knowledge and goods, are roughly the same for six countries except for Japan, which has a substantially higher level of physical information

TABLE 26

Average rate of real increase in GNP per capita (%)

Country	1963-73	1973-82
Japan	10.5	4.5
West Germany	4.7	3.2
France	5.5	2.7
United States	4.1	1.8
Canada	5.5	1.5
Britain	1.0	3.0

SOURCE: OECD (1984) *National Account Statistics*

TABLE 27

Average rate of real increase in manufacturing productivity (output/hour)

Country	1963-73	1974-82
Japan	11.3	6.2
West Germany	4.2	4.4
France	4.1	4.2
Britain	2.4	2.1
United States	2.0	1.5
Canada	2.3	1.2

SOURCE: OECD (1984) *National Account Statistics*

TABLE 28

Capital formation as a per cent of GNP

Country	1966-79
Japan	33.0
West Germany	24.3
France	23.2
Canada	22.2
Britain	18.6
United States	17.8

SOURCE: *World Business Weekly*, 15 September 1980.

(Table 28). Each of the six countries spends about 2 per cent of its GNP on research and development, and their workers have roughly comparable levels of education and experience (US National Science Board 1981).

Most analysts agree that there has been a trend towards convergence in the quantities and qualities of factor endowments in the six nations, and many also agree that this convergence is the result of the growth of world trade and the internationalization of competitive conditions. In spite of the increasing homogenization of cost and demand factors, the differences in economic performance among the six have been maintained over the last decade. From 1963-73, productivity grew five times faster in Japan than in Canada; in the period 1974-81, the same performance differential occurred in spite of the fact that both countries confronted economic conditions that were more similar than those prevailing during the former period. Canada's rate of productivity growth was about one-half the rates of West Germany and France over the period 1963-74, but in the last decade it has fallen to about one-third of the growth rates in the two European countries. The same basic point can be made about the performance of the British and United States economies – the Japanese and European economies had nearly caught up with them by 1974, yet they continued to experience growth rates only one-third as large as their rivals.

Adjustment policies

This rather negative evidence on the relationship between economic performance and inter-country differences in factor endowments has sparked a renewed interest in political and institutional explanations for different rates of increase in national wealth. Recent studies have sought to identify the political determinants of economic performance by comparing the institutions and economic policies of the five nations discussed here. These studies proceed from a evaluation of national market arrangements and economic policies in terms of their potential for promoting structural adjustments by capital and labour. Magaziner and Reich begin their comparative analysis of national industrial policies by noting that every political community which confronts structural change has 'three strategic choices':

A nation can ease the adjustment of capital and labor out of its declining businesses by assisting workers with retraining and

relocating, by subsidizing the development of new businesses within the same region or community, and by helping firms to salvage those portions of declining businesses that are capable of becoming competitive on their own. A second choice is for a nation to protect declining businesses from foreign competition, to control cost justified price increases, to prevent factory closings and relocations and to allocate government funds for the preservation of bankrupt companies. The third alternative is to do nothing and allow the market to work on its own, with resulting bankruptcies, unemployment and community or regional decline. (Magaziner and Reich 1983, 198)

These two authors, and two others discussed in this chapter – Olson and Thurow – argue that the Japanese and West Europeans have consciously shaped their market institutions and economic policies to accelerate the adjustment of labour and capital to changing conditions and world markets. The developed economies that have lagged behind – Britain, Canada, and the United States – have, it is claimed, chosen the second strategy by adopting laws and policies that retard growth in order to protect incomes and sometimes jobs from market changes. All these writers concede that the third or ‘do nothing’ alternative may be at least as effective as the first or ‘positive adjustment’ strategy in spurring economic growth. However, they conclude that the political power of investor and employee groups in all these countries makes the *laissez-faire* approach ‘politically unacceptable’ in an increasing number of cases. They contend that the key factor which distinguishes the faster-growth nations is not their ability to withstand pressures for intervention but rather their facility for constructing durable compromises between the potential losers and gainers from market changes. These compromises are reflected in laws and policies that both ameliorate private losses and create positive incentives for adjustment. Why is it that the slower-growth nations have been less successful in achieving the political compromises required to facilitate structural adjustments? The various answers offered by these analysts all focus on the institutional structures which shape public policies and determine the allocation of political power in the six countries.

First, Magaziner and Reich argue that the institutional basis for national economic success lies in formal power-sharing among dominant producer groups. They contend that employee groups are often prevented

from exercising any substantial influence over the pace and direction of economic changes in the slower-growth nations and, as a consequence, tend to commit their electoral and lobbying efforts to policies aimed at blocking industrial transitions (Reich 1983a). The faster-growth countries have achieved a consensus in favour of market-oriented adjustments because their economic and political decision-making processes give employee groups substantial influence over how the burdens and benefits of economic changes are distributed among interest groups. These writers emphasize the fact that the vast majority of workers in Britain, Canada, and the United States have no formal means of participating in company decisions while in West Germany employees are represented on workers' councils and on supervisory boards, bodies which participate directly in firm decisions (Hager 1981). Even in Japan, where organized labour is formally allied with the socialist opposition party, employees participate in companies through extensive processes of consultation with management (Cole 1979).

The structure of interest groups

A second institutional explanation for the superior performance of faster-growth nations has been advanced by Olson. He argues that the structural organization of interest groups will exert substantial influence over the types of economic policies they will advance and support (M. Olson 1982). Interest groups such as unions, business associations, and political parties which encompass significant portions of the total adult population in their political jurisdiction will be more likely to support positive adjustment policies. Policies which block or slow down economic changes reduce a nation's total wealth in order to confer concentrated benefits on protected investors and employees. Encompassing organizations, such as lobbying groups that contain most major firms in a nation, must internalize most of the total costs and benefits of economic policies and, as a result, their leaders will be much more likely to oppose measures which result in net reductions in national wealth, such as bailouts that discourage adjustment. Since encompassing institutions have a much greater concern for policies which facilitate growth and productivity increases, nations where interest groups are organized in federal structures with strong centralized leadership will be more likely to adopt laws and subsidies designed to promote market-oriented or wealth-maximizing adjustment. (Olson cites West Germany and the

Scandinavian countries as evidence in support of this hypothesis.) The national vignettes that comprise the bulk of this chapter examine the organizational structures of investor and employee groups in the five countries surveyed.

The political structure

Finally, Thurow, Cutler, and others have recently argued that certain structural features of national political processes can exert substantial influence over the types of economic policies which governments are likely to adopt. They contend that constitutions which fragment or decentralize decision-making power reduce political opposition to bailouts and other economic policies which redistribute wealth in favour of particular industries and firms (Thurow 1980; Cutler 1981). Decentralized power structures provide numerous 'access points' for narrow interests seeking regulations or subsidies designed to block or attenuate market pressures for adjustment. Therefore, this institutional explanation for differences in economic growth among nations suggests that countries with centralized decision-making procedures will be more likely to adopt policies which promote dynamic change.

The case studies which follow provide some evidence in support of this hypothesis, but they also indicate that the argument requires modification in one important respect. Constitutions which fragment power may also impose the formal or practical necessity for compromise between separate branches or levels of government before any affirmative action can be taken. Arrangements for this form of 'power-sharing' are incorporated in the West German and United States constitutions, and the case studies suggest that these provisions operate to increase political opposition to any form of state intervention whether aimed at wealth-maximization or redistribution. Constitutions which divide power between relatively autonomous branches or subdivisions of government, bodies or officials with the political resources and legal authority to act independently of one another, would appear to generate a greater propensity to adopt bailout policies aimed at blocking market-induced changes.

CASE STUDIES

The five case studies in this chapter focus on two basic features of national bailout policies: their relative frequency or incidence and their

purposes and objectives. The relative frequency of bailouts was selected as a point of comparison because it may indicate whether a national political community places a high priority on material progress as measured by increases in national income. For instance, a higher propensity to provide rescue aid to failing firms may be associated with other public policies designed to blunt market incentives and alter market-determined distributions or income. The evidence presented in this chapter, however, does not support this hypothesis, which links the frequency of bailouts to the presence of political and economic institutions that constrain wealth creation and economic efficiency. Some faster-growth nations (France, for example) bail out insolvent firms with relative frequency while others (such as West Germany) rarely give subsidies directly to failing firms. Of the slower-growth nations, Britain probably bails out insolvent firms more frequently than any of the other four countries. The United States has granted rescue aid very sparingly – excluding banks, only three large US bailouts can be identified over the past decade.

It also seems plausible that the incidence of bailouts could be related to the presence, or lack, of other national policies and programs that facilitate adaptation to market changes by employees and investors. It could be argued that nations that invest relatively more public resources in subsidizing new investments in both human and physical capital would be comparatively less likely to provide grants or credit to declining industries and failing firms. Yet the evidence indicates that recent French governments have invested heavily in 'sunrise' industries such as aeronautics and nuclear energy while at the same time providing a relatively high level of bailout aid. And successive British governments have continued their relatively high level of subsidies to 'lame duck' firms and industries while increasing the amounts of aid to infant industries, regional development, and labour adjustment. The main conclusion seems to be that the relative frequency with which a nation grants bailout aid may not explain much about its reasons for doing so.

The second point of comparison – the purposes or objectives of bailout intervention – focuses on the allocative role of selective aid to insolvent firms, either as a catalyst or lever of positive adjustment or as a drag on the redeployment of labor and capital. Faster-growth nations seem to have somewhat more success in linking bailout aid to the restructuring or shrinkage of insolvent firms. The reference to a national political community possessing purposes or objectives independent of its con-

stituents is not used in its literal sense, but rather as a general characterization of the ostensible aims of a nation's industrial subsidy policies. The general argument is that countries which use bailout aid as a lever for positive adjustment will also possess certain economic and political institutions that tend to favour economically efficient or wealth-maximizing policies. The best evidence on the political motivations for bailouts is the great degree of similarity in the types of firms which receive bailout assistance. In all the nations surveyed, the vast majority of bailed-out firms were very large manufacturing companies with regionally concentrated and predominately unionized workforces. Thus, it seems that the characteristic which distinguishes the faster-growth nations is not the types of firms they bail out but rather the kinds of conditions concerning restructuring or adjustment which they impose on aid recipients.

Japan

Japan's superior economic performance over the past three decades has required dramatic transformations in its industrial structure. In 1955, one-quarter of the Japanese gross domestic product originated in agriculture; twenty years later, only 6 per cent of its GDP originated in agricultural production. Japan in the mid-1950s resembled the conventional notion of nineteenth-century Great Britain – the textile sector bulked unusually large in total Japanese manufacturing and raw cotton was a major import. Twenty years later, the main thrust of Japanese manufacturing had changed from products, like textiles, which use large amounts of unskilled labour to products which use relatively large amounts of skilled labour and capital (Johnson 1982, 23-51). In the mid-1980s, the Japanese industries which had grown to supplant textiles (steel, shipbuilding, chemicals) are fading.

These industrial transitions have been costly for many groups of Japanese employees and investors. For example, the rate of corporate bankruptcy in Japan is four to five times higher than in the United States and Canada (Saxonhouse 1979). Several 'billion dollar' bankruptcies in the late 1970s failed to attract any rescue aid from either the banks or the government (Rohlen 1979). While virtually all Japanese manufacturing industries have experienced declines in employment since 1973, the declines have been especially dramatic in a few sectors: the textiles, shipbuilding, metal-products and general machinery indus-

tries have all experienced 15 to 20 per cent declines in their levels of employment (Shimada 1979). Reducing the size of the labour force in these industries has not simply been a matter of laying off temporary workers; rather it has required the termination of employees with permanent or 'life time status'. In fact, the permanency of regular employment is widely understood to be more sound than the economy offering it.

What features of Japanese institutions explain their relative success in fostering a readiness to adjust to economic changes? Certain aspects of the country's labour- and capital-market arrangements seem to facilitate rapid adjustment. Bailouts seem to be rather exceptional in Japan, but it is very difficult to obtain any objective information on their relative frequency because the government usually employs 'administrative guidance' (i.e. extra-legal and confidential directives) to private bank creditors in carrying out rescues of failing firms. The main result is that the government acts behind the scene to influence the terms of the arrangements negotiated between the insolvent firm and its creditors. There is some evidence that the Japanese government tends to stress the need for market-oriented adjustment when it intervenes to preserve the life of a failing firm. It is also worth considering the role of government in shaping economic change, and the reasons why the Japanese political process has supported a dominant coalition in favour of rapid growth.

Capital and labour markets

Japanese industry is financed primarily by what legally are bank loans; only about 20 per cent of its total investment is held in equity or common shares (Zysman 1983, 238-9). Moreover, Japanese banks are permitted to invest in the shares of nonfinancial companies. A recent study indicated that banks often hold large equity investments in their biggest industrial customers (Suzuki 1980, ch. 1). Most Japanese companies have a 'main bank', which arranges financing through syndicating agreements and represents its syndicate in negotiations with the borrower's management. Ties between banks and their corporate customers are further cemented by cross-directorships, and bank employees are often temporarily assigned to work in customers' businesses. When a Japanese firm gets into financial difficulties, its main bank acts as the focus for discussions among its creditors and is usually the catalyst for raising new money if a rescue is to be attempted. Several recent accounts

of large-firm insolvencies in Japan emphasize the crucial role of main banks in achieving successful reorganizations (Pascale and Rohlen 1983). The main bank's ability to both control the debtor's management, and to impose compromises on the other creditors in its syndicate, reduces the costs and delays that can arise in the restructuring process.

Most employees of large firms in Japan are organized in 'enterprise' or company unions (Cole 1979). It seems plausible to argue that enterprise unions have a greater incentive to take account of firm profitability in bargaining for wages and job security than unions organized along either craft or industry lines. Since a craft union typically represents only a small percentage of the employees of any particular firm, it has less incentive to avoid inefficient work practices or to reduce its wage demands in order to secure the employer's competitive survival (M. Olson 1982). The same general point can be made concerning unions covering all the firms in an industry. While industrial unions do have regard for the prosperity of the industry as a whole, they also have a strong incentive to resist demands for wage cuts from particular employers because of their obvious spillover effects in future negotiations with other firms in the industry. One of the striking characteristics of Japanese labour markets is the frequency of substantial wage differences among firms in the same industries (Rohlen, 1978). Another is the prevalence of bonus payments tied to profits as a substantial component in the compensation packages of most large employers (Kazutoshi 1977). As a device for cutting labour costs, bonus reductions figure prominently in bargaining between financially troubled firms and their own unions.

When Japan suffered a severe recession in 1974, many firms in the steel, shipbuilding, and other heavy industries were faced with the necessity of cutting their labour costs by 20 to 40 per cent (Saxonhouse 1979). An additional complicating factor was the need in many cases to cut labour in a manner that would allow companies to close whole facilities, as only in this way could major savings be achieved. While labour problems intensified for companies seriously in trouble, after 1974 enterprise unions moved toward increasingly flexible and pragmatic bargaining positions. Being the most expendable and vulnerable, part-time workers were laid off in considerable numbers shortly after the impact of the recession was felt. Reductions in the numbers of regular employees, whose jobs were defended by unions and by the principle of 'permanent employment', proceeded slowly as freezes on hiring brought reductions through 'natural attrition'. Two groups of

permanent employees left their jobs at relatively high rates, namely young men (approaching marriage) and older men (approaching retirement), and these groups were usually encouraged to leave early by the managers of troubled firms (Rohlen 1979). Insolvent firms were often forced into unusual measures to avoid the dismissal of permanent employees. Toyo Kogyo (Mazda) the failing automaker, for example, sent production workers to its sales affiliate which put most of them to work in direct sales. Mitsubishi Heavy Industry sent 4,000 employees (5 per cent of its total labour force) to 110 Mitsubishi firms (Koichiro 1978). A common response was to transfer factory workers to sales and service divisions or to loan them to other companies. The larger and more diversified the firm, the more opportunities were available for this kind of internal adjustment. The conglomerate structure of many large Japanese firms and their more informal links with other firms in very large industrial and financial groups may reduce the costs of these wholesale shifts of employees (Pascale and Rohlen 1983).

Perhaps more important, shifting large blocks of employees involved some very complex negotiations with company unions. If transfers were to sales agencies within the same company, as in the case of the Mazda autoworkers sent out to be salesmen, the decision required union consent. The dislocations of families and workplace relations involved would naturally generate much resistance: no policy involving such transfers could possibly be arranged without the co-operation of the union. The problem of discovering the large number of 'volunteers' who would accept transfers was a matter of negotiation not only between management and the union but also within the union itself. For inter-company transfers, the terms of formal agreements typically require that the firm being relieved of workers assume a large proportion of the transferees' salaries, usually for periods of from six months to one year. In some cases, the transfers are really just loans, with the original employer providing a guarantee to take transferred employees back after a fixed period of usually about one year (Hills 1983). During the past five years many auto firms have taken skilled employees on loan from ailing manufacturing firms. Host companies in the auto industry, for example, besides having need for additional labour, were motivated to agree to the transfer idea since they themselves were trying to cut back on their permanent labour-force levels in anticipation of slower future growth in car sales.

The crucial point regarding these transfer arrangements is that they succeeded because of close co-operation between labour and management. The capacity of unions in large firms to assume a pragmatic perspective and the willingness of management to attempt a range of innovative solutions short of layoff and terminations are illustrated in these arrangements. They also illustrate the value of Japanese management's traditional commitment to 'consultative decision-making', involving representatives of all classes of employees in discussions concerning major choices facing their firms (Cole 1979). This somewhat limited form of participatory democracy, coupled with a great deal of employment security, is often credited for the great flexibility in work assignments that prevails in Japanese industry.

The government approach

That it is appropriate for the government to participate in the shaping of industrial structure is almost unquestioned in Japan. During the past two decades, there have been two major plans for transforming Japanese industrial structure (Vogel 1979). The first plan, released in the 1960s, charted the future development of Japan's heavy and chemical industries. The second plan, announced in the 1970s, advocated an increasing emphasis on Japan's knowledge-intensive industries and advanced concrete strategies for dealing with the adjustment problems of declining industries. The Japanese adjustment policies deployed during the past ten years have taken the form of general industry-wide programs aimed at both workers and firms. Certain features of these adjustment schemes illustrate the market-oriented philosophy of Japanese industrial policy.

In 1977, the government enacted the Employees in Structurally Depressed Industries Law (Employees Law) to deal with the problems faced by workers in declining industries. Workers laid off from industries certified by the government as 'structurally depressed' receive special allowances in addition to normal unemployment-insurance benefits if they agree to participate in training and placement programs (Ramseyer 1981). The government's placement program includes a centralized computer bank that permits the identification of suitable jobs in distant areas of the nation. Workers who refuse government-assigned jobs jeopardize their right to unemployment benefits. Benefits are also contingent on an employee's willingness to participate in retraining

courses, either established or approved by the government (Ramseyer 1982). The Employees Law of 1977 also provides aid to workers retrained rather than discharged by their firms. Typically, large Japanese firms seek to retain their permanent employees through retraining and internal transfers. The government retraining subsidy covers up to one-third of the total costs of wages, benefits, and training. Moreover, in late 1978 the government initiated a large adjustment-assistance program for communities dominated by industries that had recently lost their competitiveness. Firms located in eligible communities are provided with subsidized loans and loan guarantees to finance new types of businesses, and subsidies earmarked for the provision of local employment opportunities for displaced workers (Ramseyer 1982).

The Structurally Depressed Industries Law also authorizes the Japanese Ministry of International Trade and Industry (MITI) to develop what are called 'stabilization plans' for declining industries designated by cabinet order. MITI formulates these plans through advisory councils comprised of industry and labour representatives. Major creditors, usually banks, also participate in council deliberations. The permanent scrapping of excess capacity is the most commonly employed means for restructuring a depressed industry (Magaziner and Hout 1981). As noted earlier, Japanese industries have extremely high debt-to-equity ratios and a very large proportion of plant and equipment investment serve as collateral for bank loans. Thus, the writing down or writing off of excess capacity is a very complicated decision involving not only a firm but also its creditors. Given the financial context, in the absence of government aid, both debtors and creditors will be reluctant to proceed with long-term scrapping programs. Scrapping subsidies have ranged from a somewhat more generous than normal deduction on the corporate income tax return, to cases where the government has paid firms well in excess of the replacement cost of their equipment being scrapped. For example, in 1979 the government pursued its announced goal of reducing the capacity of the troubled shipbuilding industry by securing the retirement of nine shipyards (Hills 1983). The government used subsidies and 'voluntary contributions' from companies remaining in the industry to achieve these capacity reductions. In other industries, such as aluminum and steel, government aid for retiring excess capacity has been tied explicitly to new investments in different product lines.

These government efforts to promote adjustment have not always been successful in the shipbuilding industry. The Japanese government has

continued to provide operating subsidies to several large employers, notably Sasebo Heavy Industries, which are reported to maintain substantial excess capacity. These shipbuilding firms are located in economically depressed regions of Japan, and their employees and investors are said to be well-organized and politically influential.

While bailouts seem to be concentrated in what are generally believed to be declining industries, several commentators have suggested that the government was responsible for the rescue of Toyo Kogyo, the maker of Mazda autos and trucks, when it failed in 1975. Toyo Kogyo's operations were heavily concentrated in the Hiroshima prefecture, where it directly employed about 15 per cent of the local workforce. The government's intervention, which was never publicly acknowledged, has been credited with permitting the ailing automaker to reduce the size of its operations and regain profitability within three years of insolvency. This restructuring was achieved through the major bank creditors' agreement to provide new capital (apparently backed by the governments' tacit guarantee), which was invested primarily in the development of new products and production methods.

Japan's strong and consistent commitment to positive adjustment in response to market changes can be partially explained by reference to certain features of its political process. First, business and labour interests are organized in relatively small numbers of federal groupings. For example, Japan has four major business federations that represent business interests in dealings with government ministries (Ishida 1974). These highly encompassing institutions are much more inclined to support policies designed to promote efficient adjustment than are lobbying groups which represent only the investors or employees or particular industries. Interest groups that incorporate one-third or one-half of the industries in the national economy are much less likely to press for bailouts or other measures aimed at blocking efficient reallocations of resources because such groups must, of necessity, internalize a large proportion of the welfare losses resulting from such policies. The stability and success of encompassing institutions depends on their capacity for resolving conflicts among their often heterogeneous constituents. In Japan, consensus in large 'peak associations' is achieved through decision-making procedures that emphasize direct participation in small, locally based membership units (Hills 1981). Local units send representatives to district and national councils, which determine federal group policies.

One unusual example of a highly encompassing political institution is the Liberal Democratic Party – the party that has ruled Japan continuously since the Allied occupation. The government party lacks any independent mass-based organization; it is structured as a tight confederation of more than two hundred separate organizations, representing business, labour, small business, agriculture, and religious, youth, and women's organizations (Hiroshi 1979). The party's dominant position in Japanese politics is attributed to its flexibility in changing leaders and policies in response to shifts in voter preferences. Its flexibility, in turn, is attributed to the party's diverse composition and democratic decision-making procedures.

A second characteristic of the Japanese political process that seems to exert some influence on industrial policies is the general tendency of its government institutions to centralize power in executive bureaus. Several commentators have noted that Japan's ministries are usually well insulated from political pressures for interventions that block or slow down market-guided adjustment (Pempel 1982; C. Johnson 1982). Almost one-third of the Diet members, the elected politicians, are retired civil servants who formerly held high executive positions in the government departments. The general pattern of formal economic legislation in Japan involves broad grants of discretionary authority to the ministries, and there is a strong tradition of central bureaucrats overseeing industrial-policy initiatives (Magaziner and Hout 1981). These central departments tend to possess responsibility for business development as well as taxation and regulatory matters. This consolidation of powers reduces the need for interdepartmental co-ordination and bargaining. Moreover, government departments that oversee only one or two industries are in much more danger of being 'captured' by their particular client groups. Japan's premiere economic ministry, MITI, serves as an effective forum for broad-based bargaining among major industries.

United States

Mainstream political ideology in the United States has consistently embraced the notion that government can and should be 'neutral' with regard to market adjustments. This idea of neutrality seems to incorporate two separate, but complementary, concepts. One view stresses the desirability of allowing market forces to operate free-form collective

control, while the second invokes the principle that government aid to the private sector should be broad and generic in its application – aimed at helping general classes of industries and geographic areas. This chapter makes no effort to assess the neutrality of United States policies in the first sense. The question of whether United States governments do, in fact, tend to intervene less frequently in economic matters than the governments of other developed nations has not been subjected to systematic quantitative analysis (Cameron 1978). Nor is it likely that such analysis could succeed in measuring the actual consequences of government policies, and drawing reliable qualitative comparisons between countries. In regard to the second form of neutrality, United States policies have been characterized by a relative absence of subsidies or other assistance to specific firms, either failing or otherwise. Bailout-type aid tends to be directed to entire US industries through measures such as cost-savings exemptions from pollution regulations, import quotas and special tax write-offs. This section discusses the main objectives and instruments of US industrial policy; it also describes the recent controversy surrounding the grant of bailout aid to Chrysler Corporation, a debate which stirred sharp ideological conflicts in US politics. Finally, it is argued that the Chrysler debate and the overall thrust of contemporary US industrial policy can be explained, at least partially, by certain institutional factors which shape policy outcomes in the United States.

Trade protection

In spite of their neutrality, United States policies for declining industries have not promoted structural adjustment, but rather have worked against it. The major US policy response to the competitive decline has been to provide protection from foreign competition. Under federal law, industries that can demonstrate injury from foreign competition may obtain temporary tariff or quota protection through executive or administrative action (Bratt 1974). Moreover, in recent years a wide variety of industrial products have been subject to import quotas that have been 'voluntarily' negotiated between the US and particular foreign companies or governments (Zysman and Tyson 1983). (These restrictions have been voluntary only in the sense that foreign countries have acceded to the request of the US government to limit their exports under an implicit threat of unilateral restrictions.) These voluntary quotas

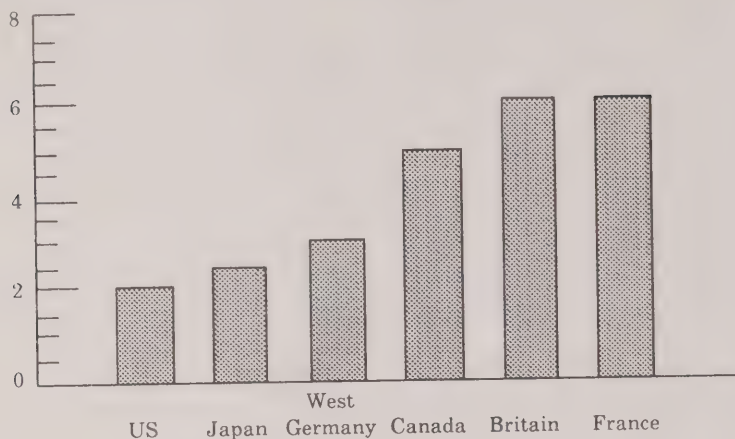
have been applied to textiles, apparel, consumer electronics, footwear, steel, and automobiles. Most analysts agree that trade protection in the United States has merely postponed the competitive decline of its ailing industries (Magaziner and Reich 1983). Although protectionist initiatives are often accompanied by proposals for re-organization of the domestic industry, these plans are usually dropped once the protective apparatus is firmly in place. Many US firms have received substantial benefits from trade protection, yet none has been required to reduce their installed capacity or to reinvest in new lines of business as a condition of the receipt of these additional profits. In a recent book on the Chrysler bailout, Reich and Donahue (1985, 5) conclude that 'trade protection arranged by the Reagan administration funneled much more money to Chrysler (at a much higher public cost) than did the loan-guarantee program'.

In addition to trade protection, the US government often comes to the aid of troubled industries by rolling back safety and health regulations. For example, both the Carter and Reagan administrations have exempted the steel and auto industries from compliance with costly environmental controls (*ibid.*). There are also a few direct-grant programs for depressed US industries. For example, the Department of Commerce administers a system of operating subsidies to US flag vessels, and the Civil Aeronautics Board provides subsidy payments to a few qualified air carriers to cover operating losses on designated routes (*ibid.*). The total amount of funding for these targeted subsidy programs is relatively small, however, when compared to expenditure levels in other countries (Figure 4).

The Trade Act

Government assistance conditioned on positive adjustments by firms and workers has played a negligible role in US industrial policy. The Trade Act of 1974 authorized the federal government to provide loans and loan guarantees for the purpose of industry restructuring (US Code Ann 1983). But the average grants under this program – only about \$1 million per firm – have been too small to have much impact on investor incentives (J.D. Richardson 1982, 342-47). Moreover, much of the financing under this program has been used to upgrade or even expand the fixed capital base of declining industries, thereby prolonging and perhaps even intensifying adjustment problems. The Trade Act also provides benefits to

FIGURE 4

Public subsidies^a to enterprises (as % of GDP as of 1980)

^a All grants on current account made to private and public industries (capital transfers are excluded).

SOURCE: OECD (1981) *National Accounts*.

workers that lose their jobs as a result of foreign imports. Applicants for aid must establish that at least 5 per cent of the workers in a firm are unemployed or have suffered at least a 20 per cent reduction in their hours of work and wages as a result of increased import competition (ibid., 341-2). Benefits available to eligible workers include 'trade readjustment allowances' of up to 70 per cent of the displaced workers' previous weekly wages, training and related services (such as testing, counselling, and placement and support services), and relocation allowances. Benefits are generally provided up to a maximum of fifty-two weeks; workers sixty years of age and older at separation may receive up to twenty-six additional weeks of adjustment allowances, and any eligible worker, regardless of age, may also receive an additional twenty-six weeks of income supplements when these payments are necessary in order to allow the worker to complete an approved training program.

The Trade Act program's half-hearted approach to worker adjustment is demonstrated by the fact that its eligibility criteria do not distinguish between temporary and permanent layoffs. Recent studies indicate that almost 75 per cent of the workers who received benefits under the

program returned to their former employers (*ibid.*, 348-50). No clear adjustment rationale exists for benefits to temporarily displaced workers because it is not obvious that these employees should leave their industries on economic-efficiency grounds. Analysis of recipients by industry classification shows that much of the assistance has been paid to workers in cyclically depressed industries, such as autos and steel. There is substantial evidence that compensation for wage losses due to temporary layoffs and reduced hours of work has neutralized market pressures for adjustment. Of the 494,000 employees certified as eligible up to September 1979, only about 4 per cent were placed in new jobs through the program, only 3.5 per cent entered training courses and less than 1 per cent received job-search and relocation benefits (*ibid.*, 349-52). Critics of the program have argued that its subsidies may have brought about a perverse expansion in the number of workers eligible for assistance since employers do not pay any financial penalty for laying off workers who are qualified to draw wage supplements. In 1981, the Reagan administration cut off most of the funds for the Trade Act programs, and there are no current plans for the US government to launch any substitute measures aimed at financing structural adjustment.

Market incentives

There is some evidence that the United States tends to rely more on market incentives to shift labour and capital than the other nations considered in this chapter. For example, comparative studies of the rate of labour adjustment in response to changes in industry output show that American workers are much more vulnerable to temporary layoffs than comparable workers in other developed countries (Shimada 1979; Rohlen 1979). Reductions in Japanese employment as measured against contemporaneous decreases in production are not as rapid – as ‘electric’ – as response rates in the US labour markets. Moreover, the Japanese rates of employment decline are about on a par with the response in leading European countries and therefore by comparative standards the American employment system seems relatively more sensitive to market-adjustment pressures.

There is some reason to conclude that lower elasticities are associated with a larger share of the cost of labour adjustment being borne by the employing enterprise, and less being borne by employees. For example,

US policy toward industrial decline and enterprise failure has never included any direct regulation of plant closings or mass layoffs. In Japan and Western Europe, firms must give two to six months notice before closing a plant and, in most of these nations, employers incur substantial severance-pay obligations when workers are laid off permanently (MacNeil 1982). While similar regulatory measures have been proposed in the United States, no legislation governing closings or layoffs has ever been endorsed by either major federal party (Magaziner and Reich 1983). US firms are constrained to bargain with their unionized employees on adjustment-related issues such as advance notice of layoffs, severance pay, and transfer rights on plant closings, but only about 20 per cent of US collective agreements contain provisions dealing with these issues (MacNeil 1982).

US labour-management relations at the firm level are characterized by increasing conflict over management's unilateral right to select production technologies and lay off workers. US Labor Department statistics indicate that during the 1970s the United States lost more working days from labour disputes than the other four nations surveyed in this chapter. A relatively small proportion of the US industrial labour force is unionized, and even among organized workers there are virtually no arrangements for participation in making company decisions. Magaziner and Reich report that '[it] was considered a dramatic step when, in connection with its support of the Chrysler Corporation bailout, the United Auto Workers demanded that ordinary workers be allowed to assume responsibility for identifying defects and systematically removing defective vehicles from the assembly lines' (Magaziner and Reich 1983, 147).

The overall adjustment effects of US bankruptcy laws have not been studied carefully, but their net impact on large corporate insolvencies is probably positive from an efficiency standpoint. Several features of the US scheme for regulating the conduct of insolvency negotiations reduce the costs of reorganizing failing firms. First, US law imposes an automatic stay on all creditors, both secured and unsecured; this provision prevents the pursuit of any collection remedies against an insolvent firm for at least four months after legal proceedings are initiated (Blum and Kaplan 1976). Second, secured creditors must vote as a class on reorganization proposals, and may not pursue their collection rights against the debtor unless the proposal fails to receive enough votes from class members to secure its adoption. Third, the level of creditor support

required for the adoption of a reorganization proposal is substantially lower than in other developed nations. US law provides that creditors holding only 66 per cent of the claims of their class may vote to impose a reorganization plan on dissenters, while other major countries require from 75 to 80 per cent support in order to bind holdouts (Schwartz 1981). Finally, US bankruptcy judges have the authority to impose a plan of reorganization on dissenting creditors when they conclude that the dissenters' objections are 'unreasonable' and would impose an unfair burden on the proponents of reorganization. While US judges use this 'cramdown' power sparingly, it must exert some deterrent influence on prospective holdouts in insolvency negotiations.

The US insolvency process has been criticized for providing too much room for procedural manoeuvre to the debtor's management who usually have a strong incentive to keep their employer in operation for as long as possible (Meckling 1977). This is merely a procedural problem which can be remedied by strengthening the creditors' powers to control the administration of the debtor's business after formal proceedings are initiated. Since US bankruptcy law encourages the reorganization and continuation of insolvent firms to a greater extent than the laws of Britain, Canada, and West Germany, it can be argued that the US approach to corporate failure does put some weight on avoiding the social costs of employee dislocation and community decline. One empirical study of US corporate reorganizations indicates that insolvent firms are more likely to attempt a reorganization than large corporate debtors in other countries (White 1980). This comparison is fairly speculative due to the lack of any standardized data on insolvencies for the jurisdictions surveyed.

Chrysler and Lockheed

The two major bailouts in the United States during the period surveyed involved rescue aid to Lockheed in 1971 and loan guarantees to Chrysler in 1979. Each of these bailouts resulted from an Administration request to Congress to adopt emergency legislation authorizing the provision of assistance to the failing firms. In both cases, the enabling legislation created a 'loan guarantee board' staffed by cabinet-level officials from the executive branch (i.e., Secretary of Treasury, Chairman of Federal Reserve System, and Chairman of the Securities Exchange Commission) (Turkel 1981; 15 US Code Ann. ss1861 1980). The boards were given the

power to guarantee loans on behalf of the insolvent firms up to a stated maximum (Lockheed – \$250 million; Chrysler – \$1.5 billion) if a number of specific conditions were satisfied.

As a first condition, the US government insisted on obtaining a super-priority for the new debts it agreed to guarantee. The result in both the Lockheed and Chrysler cases was that the governments guaranteed loans were very well secured. If either firm were liquidated in bankruptcy, its net assets would probably have been more than adequate to satisfy the government-backed loans (15 US Code Ann. ss1872 1980; US House Conference Report 1979). The government's insistence on a super-priority in both these cases suggests that it may be inaccurate to characterize the loan guarantees as 'bailouts', at least in the sense employed in this study.

The second major condition, which was imposed on Lockheed to only a limited extent, was that creditors, employees and suppliers were all required to make substantial concessions. In the Chrysler case, government analysts projected a financing shortfall of up to \$3 billion. The Loan Guarantee Act provided for a maximum of \$1.5 billion in assistance on the condition that about \$2 billion more would be forthcoming from sources with interests in Chrysler's future. The Chrysler legislation specified that about \$600 million was to be contributed by employees in the form of wage reductions over a three year period (P.L. 96-185, S7, 93 US Stat. 1330-31). Chrysler's creditors, suppliers and dealers were required to provide the additional \$1.4 billion stipulated in the Act. There is evidence that the Chrysler Loan Guarantee Board actively intervened in the negotiations among the firm's more than 400 bank and trade creditors. The consent of all the major creditors was necessary to keep Chrysler out of bankruptcy proceedings. When some banks refused to agree to the required concessions, loan board members, in particular the Treasury Secretary, were personally involved in negotiations with the holdouts (Edmonds 1983). The magnitude of the concessions involved in the Chrysler case suggests that the government's key role was as a catalyst in negotiations with creditors and employees. For example, commercial banking is a federally regulated business in the United States, and it seems likely that bank creditors would be susceptible to pressure for a settlement from an executive official whose normal job is regulating banks.

There were several other significant conditions imposed by the Chrysler bailout legislation. The Act required Chrysler to establish an

employee stock ownership plan to which the firm was required to contribute a total of not less than \$160 million over a four-year period (Freeman and Mendelowitz 1982). Chrysler was also obligated to appoint two members of its union, the United Auto Workers, to its board of directors. Finally, Chrysler was required to provide the government with warrants for the purchase of its equity shares to cover the possibility that Chrysler would recover its financial health. If Chrysler did better than expected, the US government would receive a large share of the gains. In the Chrysler case, this contingency did occur, and the government's equity warrants transformed the 'bailout' into a fairly profitable investment (Edmonds 1983).

The political debate on the Chrysler legislation echoed in many respects the controversy generated by the Lockheed case eight years earlier. Backers of the bailout legislation in both cases were concerned with the threat of job losses and community disruption. Chrysler directly employed more than 130,000 workers and at least twice that many were employed by suppliers and dealers (House Conference Report 1979). Moreover, most of these jobs were concentrated in Michigan, Indiana, and Ohio – three states that have suffered high unemployment levels over the past decade. Much of the pressure for a Chrysler bailout came from congressmen and senators representing midwestern industrial states and from organized labour (Freeman and Mendelowitz 1982). The preservation of jobs and the avoidance of regional hardship were given some emphasis in the Lockheed case, but proponents of the bailout put more emphasis on Lockheed's role as a key supplier of military aircraft and its important contribution to national security (Tukel 1981).

Proponents of both bailouts stressed the temporary and limited nature of the loan-guarantee assistance that was being provided. It was argued that both firms were economically viable without the need for continuing government support, and merely required short-term aid to avert insolvency and the risk of liquidation. Opponents in both cases argued that if the firms were good prospects for long-term profitability then an adequate amount of private financing should have been forthcoming without government guarantees. They stressed the 'moral hazard' problem implicit in establishing highly visible bailout precedents, and also contended that it was unfair to impose potential burdens on taxpayers in order to rescue banks and shareholders from investment losses (House Conference Report 1979). These opposition arguments came close to succeeding when both bailout bills proceeded to final votes in the

Congress. The Lockheed legislation passed the Senate by one vote (49-48) and the House by three votes (192-189). The Chrysler vote margins were larger, but the legislative battle was equally hard fought.

The political process

What features of the American political economy explain this nation's rather unique approach to dealing with the problems of industrial change and adjustment? The US approach is characterized by its drift or lack of positive direction, and also by its conservative reliance on market-generated incentives for shifting labour and capital to more valuable uses. These dual features of US policy seem paradoxical; one would assume that such heavy reliance on market forces would also lead to government efforts to facilitate and promote positive adjustments to changes in market conditions. Instead, most direct interventions by US governments have operated to block or attenuate incentives for investors to retire obsolete plants and for workers to retrain or relocate. Critics of US policies argue that the highly fragmented nature of the American political process precludes the formation of any durable coalition in support of improving the nation's economic performance (Thurow 1980).

This fragmentation of political power is reflected in the organization of US interest groups. There are no powerful 'peak organizations'; businesses are represented by industry trade associations and employees exert political influence through industrial unions lacking any strong national federal structures. While the two large American political parties are highly encompassing institutions in a formal sense, there is no tradition of party discipline and no centralized apparatus to press for conformity to party policies (Cutler 1981). The US constitution fragments political power by its formal separation of legislative and executive functions, and by its federal structure which divides power between Congress and fifty state legislatures. Government bureaus and departments at both the federal and state levels tend to have overlapping jurisdictions with the result that major policy decisions require extensive negotiations between officials with conflicting bases of political support. (Vernon 1974; Reich and Donahue 1985, 89 and 161).

The structure of the US political process makes it relatively easy for narrow interest groups seeking trade protection or bailouts to place their concerns on the formal political agenda. Legislative sponsors can always be recruited for bills aimed at insulating influential constituents from

market changes, and government departments can be persuaded to lobby the executive branch on behalf of trade associations and unions who have provided reliable support for departmental initiatives in the past.

The main impediment to special-interest measures in the US system arises from its emphasis on the sharing of formal political power. Intervention on behalf of particular groups of investors and employees generally requires the consent of both Houses of Congress and the President. Each of these institutional actors derive their political support from separate constituencies which often have conflicting interests in policy issues (McKie 1980). For example, when Chrysler sought bailout assistance from the federal government there was no executive department which possessed the independent legal authority to grant the aid requested. Moreover, no single state possessed the financial resources to provide the large amount of aid required. A formal act of Congress, which could not succeed without strong presidential support, was the only route available to Chrysler. This US system of 'checks and balances' operates to increase the political opposition to special-interest measures, and tends to countervail the pressures for intervention which arise from its highly decentralized power structure.

The main economic disadvantage of the United States' decentralized political system and fragmented producer groups is that government has great difficulty in mobilizing majority support for wealth-maximizing industrial policies. These institutional structures which divide power, while at the same time parceling it out to legally interdependent decision-makers, make the US system more responsive to the demands of particular interest groups for protection from market changes. While the US government seems to have the lowest propensity to grant bailout aid of the five nations surveyed, its protectionist and adjustment-retarding industrial policies manifest the absence of any politically effective consensus in favor of rapid economic growth.

Britain

The relatively slow rates of economic growth which Britain has experienced since World War II have inspired much debate about, and experimentation with, industrial policies. Most experiments have been conducted by Labour governments; the Conservatives have mainly attempted to dismantle or reduce the size of Labour's industrial programs during their years in power. During the past two decades of its

'on again off again' industrial policies, Britain has experienced the lowest rate of private-sector investment in any OECD country, low output and productivity, and a workforce with low wages and morale. Most analysts agree that British industrial policies have failed to reverse the country's continuing economic decline and have perhaps made matters worse by deflecting market incentives for much needed structural adjustments (Blackaby 1978; Wilks 1983). Most government assistance has been directed to the maintenance of employment in economically depressed regions and declining industries rather than to the reorganization of outmoded industrial structures and the promotion of market-driven adjustments by labour and capital. Much of this aid has taken the form of financial subsidies directed to specific failing firms (Grant 1982).

Of the countries surveyed in this chapter, Britain has been the most active bailout subsidizer, providing billions of pounds every year in a wide variety of industries, and nationalizing companies to rationalize the declining industries to make them more competitive, although recently the Thatcher government has emphasized the importance of reducing the size of large loss-making firms in the steel, auto, shipbuilding, and machine-tool industries. Repeatedly, since the early 1970s, British governments have provided grants, loans, and guarantees to failing firms with the understanding that the funding was only temporary. In most cases, these initial time-limited grants or loans have been extended indefinitely or converted into an equity interest held by the government, with an implicit commitment of continuing subsidies to cover operating deficits. British industrial policy has evolved from a system of general subsidies for low-income regions to a series of firm-specific crisis interventions and has culminated in widespread public ownership of 'lame duck' companies with limited prospects for long-run profitability. This brief account is followed by some observations regarding British political and economic institutions, and in particular, how certain of their structural features have shaped Britain's past record of anti-market, wealth-reducing industrial policies.

British industrial policy: a chronology

Direct government subsidization of the private sector, as opposed to tax benefits, trade protection and other indirect forms of aid, is a comparatively recent phenomenon in Britain (Burton 1979). Only the cotton-

textile industry, facing contraction as a result of low-price import competition, received direct grants and subsidized loans during the 1950s, and a large part of this assistance was conditioned on the scrapping of excess capacity (Grant 1982). In 1960, when the Conservatives held power, the main industrial-policy issues concerned the steel and road haulage industries which had been nationalized by the previous Labour government and were subsequently de-nationalized by the Conservatives. Moreover, the Conservatives considered industrial policy as basically an instrument for solving regional economic problems in Britain. The basic program consisted of general investment subsidies and tax benefits provided to firms agreeing to locate in areas of above-average unemployment (Burton 1979). There were no operating subsidies to failing firms, nor any job subsidies to declining industries. When Labour came to power in the mid-1960s, it announced its intention to attempt overall economic planning through tripartite or corporatist deliberative bodies and 'national plans' setting targets for each industry (Hartley 1977).

While the government's planning initiatives were soon shelved in the face of strong private-sector resistance, Labour did introduce several industrial-policy innovations. One example, the 'regional employment' system, is designed to provide job subsidies to manufacturing firms located in depressed regions. Several variants of this system have been used over the past two decades and it is currently the largest direct employment-subsidy program in Britain, costing about £500 million pounds in 1981 (Grant 1982). A second innovation by Labour was the creation of the Industrial Reorganization Corporation (IRC), a crown corporation whose mission was the restructuring of British manufacturing industry. The IRC was governed by a board of prominent private-sector managers, and was authorized to grant loans or take equity positions in order to facilitate mergers and other rationalization schemes (Coates 1982). The IRC played a role in a wide variety of industries during the 1960s, including electronics, aluminum smelting, computers, fisheries, and machine tools. While the IRC emphasized its role of promoting technological progress and improving the competitiveness of British industry, a substantial proportion of its investment portfolio was comprised of failing firms. However, most of the assistance was provided in the form of loans or guarantees of rather short maturities. With the exception of equity investments in Chrysler UK and British Leyland, the IRC provided funds strictly on a 'one-shot basis'.

The Conservative government which came to office in 1970 was opposed on ideological grounds to Labour's experiments with planning and selective interventions to shape the nation's industrial structure. It abolished the IRC, and proclaimed its much publicized 'lame duck' policy – a pledge to halt open-ended support for troubled firms. The Conservatives' goal of reducing intervention in industry was not seriously pursued. In 1971, Rolls-Royce ran into financial difficulty and was rescued by a government loan of £200 million (Grant 1982). A short time later, Upper Clyde Shipbuilders, the largest employer in a depressed area of Scotland, was saved from bankruptcy by a government-backed loan of £40 million (Blackaby 1978). The Conservatives also spent over £300 million to continue the development of the Concorde, which by the early 1970s was perceived by most analysts to be a commercial disaster with little prospect of financial success (Wilks 1983). The government also bailed out a succession of smaller firms in the shipbuilding, machine-tool, motorcycle, and textile industries during the mid-1970s. When Labour returned to power in 1974 it had to cope with a whole new flock of 'lame ducks'.

In 1975, the Labour government attempted a different approach to managing industrial policy by the creation of the National Enterprise Board (NEB). The NEB's statutory mandate declared that its main mission would be to promote growth sectors of the economy – that is, advanced-technology industries – but it was also empowered to assist troubled industries or specific firms if such assistance was necessary to prevent high unemployment (Curzon-Price 1981). Candidates for bailout assistance were to be designated by the Minister of Industry. Although the NEB was originally intended to exercise considerable freedom from the government in choosing particular industries and firms for support, over 90 per cent of its £1,000 million budget allocation has been spent on bailouts directed by the government. More than half the Board's resources have been channeled to one firm – British Leyland – in the form of both loans and equity shares (Grant 1982). The NEB was also mandated to take equity positions in several other loss-making firms, such as Rolls-Royce, Alfred Herbert (machine tools), British Steel, and Chrysler UK.

The case of Chrysler UK was typical of Labour government bailouts during the 1970s. In 1975, when Chrysler became insolvent, it employed 25,000 workers at several plants located in economically depressed areas of Britain and Scotland (Coates 1982). Many more jobs were at stake in

supplier plants, dealerships, and the cities and towns dependent on Chrysler's continued viability. Chrysler and the government eventually concluded an agreement which called for operating-loss subsidies for a three-year period (estimated to cost £100 million) plus loans and guarantees for an additional £250 million of new debt financing (Coates 1982). The government also agreed to allow Chrysler to lay off about one-third of its total workforce if the firm's prospects did not justify their retention at the end of the three-year agreement. About two and one-half years later, Chrysler sold all its UK operations to Citroen-Peugeot, which promptly announced its intention to close plants in Scotland and Northern England unless additional operating subsidies were provided. By this time (1979), the Thatcher government had replaced Labour, and the Conservatives refused to extend further bailout assistance. A short time later, more than half of the former Chrysler plants were permanently closed.

The Thatcher government advocated a break with Labour's interventionist industrial policies. A return to 'market realities' was offered as an alternative to continuous subsidization of bankrupt firms. The Conservatives have taken some steps to deliver on their campaign promises, but most of the large firms that were bailed out during the 1960s and 1970s continue to receive government subsidies (Curzon-Price 1981). Huge firms that were nationalized by Labour such as British Steel and British Leyland, have not had their operating subsidies reduced and yet offer little prospect of breaking even in the foreseeable future. Most analysts suggest that the government's overriding concern is the maintenance of jobs in depressed areas. For example, it is estimated that the removal of operating subsidies to British Steel alone would result in 75,000 redundancies, and most layoffs would be concentrated in already hard-pressed cities and towns (Grant 1982). Yet the Conservatives have recently refused to bail out the aluminum-smelting industry which was virtually created from scratch by the former Labour government to provide jobs in depressed areas of Scotland. Aid was also denied for the De Lorean car company which employed 2,000 workers in Belfast, Northern Ireland (Wilks 1983).

The Thatcher government has also developed new industrial-policy instruments that are designed to counteract the disincentives to market adjustment generated by its bailout subsidies. The Conservatives have doubled expenditures to promote labour mobility through various retraining and relocation programs. Most of these programs have not

been studied by analysts independent of the government, but some critics have alleged that these adjustment initiatives have been badly coordinated and that the amounts being spent are far too small to ameliorate Britain's very serious regional unemployment problems (Zysman 1983). The Conservatives have also expanded the 'redundancy payments' system that was first introduced in 1965 to provide financial incentives to induce workers to leave jobs in declining industries. For example, the Shipbuilding Redundancy Payments Act of 1979 provides tax-free compensation to workers who agree to permanently leave their jobs; these payments are worth about 150 per cent of average yearly earnings in the industry (Burton 1979). Finally, the Conservatives have created tighter controls for nationalized firms that require annual operating subsidies. The Auditor-General has been authorized to conduct strict audits of these crown corporations; previous governments had permitted the use of private auditors and had restricted public disclosure of information concerning the financial affairs of public enterprises engaged in commercial activities (Curzon-Price 1981). The Thatcher government has also dismantled the National Enterprise Board; its shareholdings have been transferred to the Department of Industry, and the Minister must now provide annual reports on the financial affairs of the firms under his control to the Public Accounts Committee of the House of Commons (Coates 1982).

The structural constraints

Over the past two decades, British industrial-subsidy policies have operated primarily as impediments to economic change and structural adjustment. While the Thatcher government has reduced levels of assistance to some declining industries such as autos and steel, these cuts in bailout assistance have fallen far short of the sweeping proposals for de-nationalization and subsidy cutbacks advanced by the Conservatives in the last election. Why have the Conservatives been unable, for the most part, to phase out programs designed to prop up ailing industries and failing firms? A brief analysis of the institutional structures of British producer groups, and of the organization of governmental decision-making processes in Britain, suggests some partial explanations for the overall scope and direction of its industrial policies.

Unionized employees account for more than 50 per cent of the British workforce, which is one of the highest rates of union participation found

among advanced industrial nations. In some key industries, such as coal-mining, steel, shipbuilding, and transport, over 90 per cent of the workforce belongs to a trade union (Saunders 1981). The union movement has substantial influence within the Labour Party, which has been in office for about eighteen of the last thirty-eight years, and its ability to block the policies even of Conservative governments, primarily through strike threats, has been demonstrated on several occasions in recent years. The organization of unionized labour in Britain is, however, highly fragmented. There is a central Trades Union Congress (TUC) to which most organized workers are affiliated, but it is a loose confederation with very limited bureaucratic resources and few sanctions to apply against its member unions (Ashford 1981). More than 100 separate unions are affiliated with the TUC; many are industrial unions but a substantial minority are organized along craft lines. The TUC leadership has limited influence over its member unions, and has generally failed to mobilize support for industrial policies that would advance the general interest of all British employees in higher productivity and faster economic growth.

British business interests have also failed to create strong encompassing organizations; firms exert political influence through a decentralized system of trade and employers' associations organized along industry lines (Grant 1982). The main peak organization of British business is the Confederation of British Industry (CBI), which represents firms who employ more than ten million people, one-half of the total national workforce excluding central and local governments. The CBI, whose membership includes the 100 largest manufacturing firms in Britain, has exercised little influence over the lobbying efforts of its constituent associations. The Devlin Report on Industrial and Commercial Representation called attention to 'an excessive number of disconnected trade associations, each serving its own limited purposes, "encouraging" the parochial outlook of businessmen who do not see beyond their own particular product' (Wilks 1983, 231; Hayward 1976). The Report recommended that the CBI should seek to reduce the number of affiliated trade associations from around two hundred to forty, but these proposals for the amalgamation of member associations have not been adopted. Most lobbying and electoral activity are initiated either by industry-based associations or by very large firms. Consequently, the considerable political power of British business is deployed in support of

policies which target most of their benefits on particular industries or firms such as trade protection and bailouts.

Certain features of the constitutional system seem to promote the centralization of authority in British government. The unitary structure of the British state precludes the kind of political competition from provincial premiers or governors that central governments must face in Canada and the United States. Moreover, the absence of a politically independent legislature, such as the US Congress, further reduces the British executive's competitors for influence. The swings in British industrial policy over the period surveyed might appear to indicate that parties which succeed in forming a new government have substantial resources and legal authority to put their policies into action. The earlier historical analysis indicates, however, that these changes in the articulated objectives and instruments of British industrial policy have obscured broad similarities in the economic effects of the various measures adopted by both parties during the postwar period. In particular, the Thatcher government's inability to bring about any substantial cutback in bailout assistance supports the conclusion that the British form of Cabinet government incorporates a much greater degree of decentralization than its formal structure would appear to permit.

Each of the two major political parties in Britain encompasses a fairly heterogeneous mix of interest groups (Rose 1974). When a party succeeds in a general election, the Cabinet selected by its elected members becomes the main forum for interest-group representation in formulating and implementing government policies. Cabinet members are selected primarily because of their links with particular factions and constituencies within the governing party. British cabinets tend to be rather large, comprising about twenty-five members with full ministerial status and about sixty more in posts of sub-Cabinet rank (Alderman 1976). Thus, the process of reaching consensus within Cabinet necessitates bargaining among ministers dependent on the support of groups whose interest will often conflict with regard to specific policies. Much of this bargaining occurs in interdepartmental committees where senior civil servants represent the interests of their departments' respective 'client groups' (Grant 1982). This fragmentation of power embodied in the composition of the Cabinet and in the organization of the civil service is only partially offset by the formal authority of the Prime Minister. While the British Prime Minister wields significant power of appointment and patronage, there is no

central policy bureau within the PM's staff that controls the Cabinet's agenda (Rose 1981). Policy initiatives and briefing papers are prepared by government departments for submission directly to the members of Cabinet. This system of executive decision-making limits the PM's ability to influence the flow of information and policy advice to Cabinet members. In summary, the British form of cabinet government may often operate to reduce the amount of political resistance to special-interest measures, such as bailouts, because of its tendency to fragment and decentralize executive power.

West Germany

West German industrial policy during the postwar era has emphasized the promotion of competition and the need to speed up labour and capital adjustments to market changes. The German version of corporatist democracy, often referred to as 'concerted action', has produced a stable consensus among labour and business groups on the desirability of relying on market forces to allocate productive resources. Its political and economic structures embody many of the organizational features identified in Japanese institutions – features that internalize political conflict in strong federal organizations. Most industrial subsidies are provided by either investment incentives aimed at promoting the development of depressed regions, or direct assistance to employees designed to encourage the acquisition of new job skills. German governments have consistently opposed, with a few notable lapses, measures aimed at propping up unprofitable firms and declining industries. In all but a few highly exceptional cases, the government has allowed very large insolvent firms to fail while at the same time providing generous subsidies to speed up the re-employment of displaced workers. The first part of this section on West Germany summarizes the main elements of its industrial policy, and certain features of its capital- and labour-market institutions that appear to facilitate efficient shifts in industrial structure. The concluding part of this discussion examines the political basis of Germany's 'concerted action' system, and how that process operates to create a stable consensus in favour of policies that promote dynamic change in the West German economy.

Industrial policy

German industrial policy has consistently embodied three main objec-

tives during the postwar period: the promotion of new businesses employing highly trained workers and advanced technologies, the alleviation of regional economic hardship, and the improvement of labour mobility (Kuster 1974). Most direct-subsidy programs in Germany are designed to promote new products and production processes (Franko 1980). With the founding of the Ministry of Technology (BMFT) in 1972, Germany has developed an elaborate system for providing cash grants on a selective basis to fund new projects. Only about 10 per cent of government aid to industrial research and development takes the form of general tax incentives (Magaziner and Reich 1983). Public appropriations by the *Bundestag* (federal parliament) are authorized each year for general industrial-policy objectives such as vocational training or developing low-income regions. These funds are allocated by the Ministry of Technology through an advisory committee composed of government officials and industry and labour representatives. This committee screens R&D projects proposed by specific firms and makes recommendations to the Ministry. When the Ministry decides to back a particular project, it usually requires that at least one-half the funds required be obtained from private investors. The Ministry supervises thousands of projects with a very small permanent staff; it employs a broad network of independent experts drawn from business and academe to oversee the projects and to act as links with government.

The federal and *lander* (state) governments have also provided substantial amounts of assistance to promote the industrialization of depressed regions. Germany spends much more on regional-investment incentives than any of the other nations surveyed in this chapter (Donges 1980). Over the past decade, the average annual budget for regional programs has been over \$4 billion (1980 US dollars), which represents about 15 per cent of total German industrial investment during this period (Magaziner and Reich 1982). Most regional aid is provided in the form of investment subsidies, ranging from 15 to 25 per cent of the total investment, depending on classification of the region on a scale which measures per capita income, levels of unemployment, and lack of infrastructure. These investment incentives are distributed through a system in which private-sector financial institutions 'play an active part in helping to choose the recipient' (Zysman 1983). Applications for aid must be approved by a bank, usually one of Germany's three large investment banks, and the bank must make a substantial commitment of its own funds to the project. If the proposal is approved by the Ministry of

Economics, government assistance is structured by the Ministry of Economics in the form of a subsidized loan by the bank, with the private-sector lender assuming the responsibility for administering the investment (Medley 1982).

Most of the direct subsidies to declining industries have been channeled through the regional-aid program. The main result has been an emphasis on sectoral rationalization and the transfer of resources to more promising lines of business (Peacock 1980). For example, German governments have provided large subsidies to their ailing steel and shipbuilding industries, but they have left the selection of new investment projects to the private firms and their bankers. Since the early 1970s, the German steel industry has undergone a very effective adaptation that has involved rationalization, closures, specialization, and a concentration of production. Between 1973 and 1980, the industry's labour force was reduced by 15 per cent and total production capacity was cut by 35 per cent while, with substantial government subsidies, the investment rate in modern plant was increased. In 1978, IG Metall, the steelworkers' union, obtained federal guarantees covering up to DM 1 billion of finance for a 'social plan' to aid displaced workers, especially those residing in the depressed Saar region (Esser 1982). The rapid decline of the West German shipbuilding industry in the late 1970s devastated the economies of the four coastal states and generated strong union pressure for rescue aid. In 1979, the federal government launched a program of aid for restructuring the industry and promoting new industrial development in the coastal states. The total number of persons employed in shipbuilding declined to 50 per cent of its 1975 level, yet the union co-operated with the restructuring strategy and labour representatives played an active role in planning and implementing the industry's reorganization.

Capital and labour markets

The 'big three' German banks have been especially effective in promoting structural adjustment because of their ability to plan for an entire sector and to impose cuts where necessary with relatively little concern for the political pressures to safeguard regional interests and employment that the government would have faced if it were seen as the instigator' (Zysman 1983, 233). Zysman's analysis also indicates that the close links between German banks and their industrial clients tend to promote the

voluntary reorganization of failing firms, which reduces the number of bailout candidates pressing for government support (ibid. 251-75).

Germany's banking industry is highly concentrated; it is dominated by three large 'commercial' banks – Deutsche Bank, Dresdner Bank, and Commerz bank – which together exert substantial influence over the smaller banks and industrial borrowers. The rate of internal financing in German industrial companies is very low (around 30 per cent) in comparison to that in other developed countries, with the notable exception of Japan where only around 20 per cent of industrial investment takes the form of equity shares. Moreover, German banks are permitted to invest in the common shares of nonfinancial firms, and they often hold large equity stakes in their borrowers' businesses.

Two important features of German company law provide the banks with substantial leverage over their clients. First, almost 85 per cent of all shareholders in Germany deposit their shares with one of the three dominant banks under trust agreements which provide the custodian-bank with broad discretion to vote the owner's shares (Medley 1982). The law also permits banks to, in effect, lend their voting rights to other banks. Second, under German company law, the votes of 25 per cent of the shares in a company are sufficient to block any measure submitted for shareholder ratification, which is generally required for major business decisions. Medley reports that, as of 1980, the banks voted 70 per cent of the shares of the 425 largest firms in Germany, and that 318 of the top 400 companies had an average of two bankers on their supervisory boards (Medley 1982).

While these close links between banks and their borrowers probably lessen competition in the financial sector and have come under increasing criticism in recent years, they also seem likely to reduce the transactions costs of reorganizing and liquidating large insolvent debtors. In particular, given the concentration of the banking industry, the banks' legal powers to control their debtor's management, and the very small number of major creditors involved in even the largest insolvencies, the German system of managing enterprise failure would seem to eliminate any serious risk of breakdowns in insolvency negotiations arising from strategic behaviour. German bankruptcy law appears to be virtually identical to the Canadian scheme described in an earlier chapter (Gessner 1978). It should be noted, however, that rules designed to protect minority creditors, such as the exit option for secured creditors, are less likely to have a divisive impact on creditor nego-

tiations in the much more concentrated and cohesive German banking industry than they are in its Canadian counterpart.

Zysman has recently argued that developed nations which possess tightly oligopolistic or government-owned financial institutions enjoy a comparative advantage over other advanced countries in promoting industrial development. He cites West Germany, France (where most large banks are state-owned), and Japan (where the government's central bank regulates the allocation of all private finance) as examples of faster-growth countries that have relied on subsidized credit to promote particular industries and firms. Zysman contends that:

[T]here are two reasons why credit allocation is a particularly effective instrument of industrial policy. First, credit allocation is critical in industrial policy simply because specific business decisions are hard to control or influence through administrative or regulatory rules. Those same decisions may, however, be influenced by negotiation in which the payment for services rendered is calculated in monetary terms. Discretionary influence in industrial finance permits the government to deal within the framework of business decisions and to affect the balance sheet directly. Second, credit allocation is a universal tool, one that eliminates the need to find specific authority to influence private decisions or to control an agency that has formal authority over a specific policy instrument. It should be noted that taxation is not as flexible as credit allocation. Taxes can be used to target categories of action but they are difficult to manipulate toward specific industrial ends. (Ibid. 76-77)

Zysman also argues that Britain and the United States both share the handicap of possessing atomistically structured and privately owned financial institutions which tend to be more resistant to state direction.

Labour-market policies have also played an important role in easing the hardships faced by German workers in declining industries and failing firms. German governments provide unemployment benefits that are substantially more generous than those provided by the other countries surveyed in this chapter (Esser 1982). These general income-support payments are linked to extensive programs for retraining and relocating displaced workers. The federal government has also created a 'transitional voucher' program directed to workers who have been unemployed for one year or more:

Under this program, the unemployed worker negotiates with a new employer for a wage package that roughly approximates prior earnings; the employer receives a subsidy that pays the difference between the audited cost of hiring and retraining the worker and the worker's audited contribution to the firm's profits. (Magaziner and Reich 1983, 274)

Employers who hire workers under the voucher program are eligible for wage subsidies for two years.

The political approach

German governments have typically responded to requests for bailout aid by refusing to subsidize the operating losses of failing firms and instead offering aid directly to displaced employees. For example, Volkswagen lost US \$300 million in 1974, and its management announced that the necessary restructuring would involve 25,000 redundancies. When the union pressed for rescue aid, the government refused in spite of the fact that almost 5 per cent of the total workforce depended on Volkswagen for their jobs, and the firm accounted for over one-third of all German exports to the US market. The government budgeted DM 250 million to encourage investment in new businesses in the regions affected by the redundancies (Curzon-Price 1981). In addition, programs for the retraining and relocation of former Volkswagen employees were very generously funded – the relocation of the 25,000 employees involved is estimated to have cost the government DM 8,500 per worker. Curzon-Price reports that a very small amount of direct aid was provided to Volkswagen on the authorization of Chancellor Helmut Schmidt. This subsidy gave rise to a successful court action on the grounds that the federal executive lacked the constitutional power to grant subsidies in the absence of specific enabling legislation.

A survey of the English financial press indicates that German governments have sought to follow a policy of market-led adjustment, and have granted rescue aid to failing firms on only a few occasions over the past decade. In 1967, the German economy was hit by a deep recession and the most prominent victim was the Krupp conglomerate, which employed more than 110,000 workers in the Ruhr coal and steel district. Bonn bailed out the firm with loan guarantees for US \$200 million of new debt finance (Esser 1982). In return for its aid, the government insisted

on substantial wage concessions and creditors were required to forgive almost 30 per cent of Krupp's total debt load. Moreover, at the time most analysts believed that Krupp was viable since it had several profitable affiliates in the machinery and electronics sectors. The government required a phased contraction of the firm's loss-making steel and coal-mining operations. Today, Krupp's coal and steel employment has shrunk to less than one-half its size in 1967; the firm now concentrates on advanced engineering activities and is financially successful.

The federal government has also recently provided rescue aid to AEG Telefunken, the giant electronics firm that employs 140,000 workers and operates many plants in high unemployment regions. When AEG fell victim to foreign competition and a 15 per cent prime lending rate in 1980, its 'house bank', Dresdner, arranged a voluntary reorganization which required creditors to write off one-half the value of their claims. But by late 1982, the banks had decided to refuse to put any additional funds into AEG and Bonn came to the rescue with a promise to guarantee up to 50 per cent of AEG's refinancing requirements (Esser 1982). Not long after the rescue announcement, AEG's prospects improved slightly and, to date, the firm has not called on the government for its promised guarantee. With the unemployment rate at an unprecedented 8 per cent, there was strong pressure for government to avoid the mass layoffs that would have resulted from an AEG failure.

German unions have generally accepted the necessity of adjustment and adaption by workers in response to the exigencies of economic change. This market orientation has probably benefited the majority of German workers in terms of continuous high employment and increases in real wages. The co-operative attitude of German unions is at least partially attributable to the existence of both legislative and contractual arrangements for 'codetermination' with management in reaching decisions on plant shutdowns and mass dismissals (Gunter 1979; Cullingford 1976). The supervisory boards of firms subject to codetermination include an equal number of worker representatives and managers plus one or more neutral members. These 'works councils' exercise control over working conditions and dismissals, usually in response to employer-initiated proposals. The role of the works councils in the preparation of so-called 'social plans' is an example of how codetermination operates in practice. German labour law requires the formulation of detailed plans comprising all the issues that must be negotiated between management and works councils in advance of

permanent staff reductions or shutdowns. These include provisions for temporary delays on dismissals, retraining and relocation programs, and entitlement to severance pay (Bendick 1981).

In the mid-1970s, a group of independent experts studied the effects of codetermination on structural adjustment in the German economy. Their report found that rationalization measures, mergers, and shutdowns had not been prevented or blocked by labour representatives, although such decisions had obvious negative impacts on the affected employees (Cullingford 1976). On the other hand, the empirical studies indicated that the speed of worker redeployment was often retarded by the need to reach a consensus among management and labour representatives, and that dismissals were always conditioned on the provision of severance payments and retraining opportunities with the employing firm. Moreover, there is other evidence which suggests that German firms have a comparatively good record of bringing negotiations between workers and management to a nondisruptive conclusion. For example, during the 1970s the United States experienced over fifteen times the number of days lost to industrial disputes per 1,000 employees as did West Germany (see Figure 5).

Several features of the institutional structure of German politics suggest partial explanations for that nation's record of superior economic performance. Both employees and investors are represented in the political process by strong federal bodies which exert decisive influence over economic-policy issues with nation-wide impacts, such as wage levels and industrial subsidies. Organized labour in Germany encompasses sixteen very large unions, each covering entire industries with up to several million members in them (Markovits 1982). All are affiliated to a central federation, the *Deutschegewerkschaftsbund* (DGB), which is governed by the leaders of the member unions.

In the view of most analysts, these two organizational features – unions organized along industrial lines and a unitary union movement – are primarily responsible for the German record of co-operative industrial relations. Dyson has argued that this encompassing structure for the national representation of employee interests makes it rational on an individual level for German workers to accept wage restraint (Dyson 1982). Only a broad encompassing structure like the DGB with the power to effectively control dissidents can impose restraint on virtually all unions, and ensure that opportunistic demands by unions with relatively stronger bargaining power do not cause consensual anti-inflation re-

FIGURE 5

Working days lost per 1,000 unionized employees (1970-78) due to industrial disputes



SOURCE: U.S. Department of Labour 1979.

straints to unravel. In short, the DGB manages what Lembruch has called 'income policy from below' by providing a framework for co-ordination among the leaders of its constituent unions (Lembruch 1979).

German business interests are also represented by one very large federation of trade and employer's associations called the *Deutscher Industrie und Handelstag* (DIHT). The German version of corporatism is often referred to as 'tacit tripartism' and involves formal but secret consultation among key Cabinet ministers, representatives from the DIHT and DGB and the executive of the national bank on major economic issues, including proposals for bailout assistance (Kuster 1974). This structure for 'concerted action' has operated to improve the consistency of German industrial policies and has ensured that major structural adjustments have been managed in a co-ordinated manner.

Government in the Federal Republic of Germany seems characterized by a considerable dispersion of political power. The postwar constitution or Basic Law (*Grundgesetz*) separates and distributes power among the legislative and executive branches of the federal government (Johnson 1973). This intended decentralization of power is also reflected in the federal structure of German government. The constitutional distribution of powers between the federal level and the eleven *lander* (states) is, however, a rather clear-cut vertical division of functions: legislation articulating basic policy originates in the federal parliament (*Bundestag*), while policy implementation is largely the task of the *lander*. The fact that the federal government depends on the *lander* to carry out most of its initiatives results in a system of federalist power-sharing which limits the policy-making autonomy of both levels of government (Mayntz and Scharpf 1975). Neither the central nor provincial governments can proceed with major policy changes unless both consent. Moreover, the *lander* have their own direct representatives at the federal level in the *Bundesrat*, the upper house of the federal parliament. These representatives are not directly elected, but the prime ministers and other cabinet members of the *lander* governments are. The *Bundesrat* must approve all federal legislation which directly affects the *lander*, which would generally include most instruments of industrial policy. Thus, the viewpoint of *lander* governments, and the regional interest groups from which they derive their political support, must be taken into account in central government decision-making.

Both levels of government in West Germany are organized along parliamentary lines, with most executive responsibilities being discharged by cabinets similar to those found in Britain and Canada. The German prime minister, the Chancellor, seems to have somewhat less control over the ministers of his cabinet than his British or Canadian counterparts, but it is clear that major policy changes cannot be initiated by a minister without the prior approval of Cabinet. The German system of cabinet administration has the overall effect of centralizing power over industrial policy, and ensuring the efficient co-ordination of subsidy and regulatory programs (Mayntz 1981; Donges 1980).

France

The French state has been the chief agent of that nation's economic development during the postwar period. In Stanley Hoffmann's words,

the postwar French state has been 'the incubator and promoter of the new economic and social order' (Hoffman 1974, 236). French industrial policy in the postwar era has been distinguished from policies adopted in the other nations surveyed in this chapter by the frequency and broad scope of state intervention aimed at guiding industrial development.

The centre-right coalition which has governed France for most of the past thirty-five years has endorsed an estatist conception of the government's role in dealing with the problems of industrial decline and renewal. Estatism is the view that the state is an entity 'separate and above' the private groups and classes which comprise the political community because it alone possesses the neutrality to act for the general interest (Shonfield 1965). This notion of the state's role has not only led to a high level of intervention in French industrial activity, but it has also encouraged a firm-specific, case-by-case approach in the allocation of public assistance to private industry.

For the first twenty-five years after the war, France experienced the highest rate of economic growth in Western Europe, and the second highest rate of investment among the OECD nations. By the 1970s, it was common knowledge that France was the beneficiary of an 'economic miracle' brought about by the government's acuity in picking industrial winners (Zysman 1983). Since the mid-1970s, however, the French planners have had to contend with significant increases that have threatened the continued viability of many labour- and energy-intensive industries. From 1974 to 1981, bankruptcies increased by 70 per cent, and the rate of decline in the French industrial labour force was more rapid than for all other advanced industrialized nations (Green 1983). Many of the government's 'national champions', firms originally launched or restructured with state aid, have returned to Paris during the past decade to ask for rescue aid. While some requests for bailout aid by very large firms have been denied, several rescues have been granted and these commitments have sometimes led to the nationalization of firms with meagre prospects for future profitability. In 1983, the French government paid 20 billion francs (approximately 8 per cent of its total budget) in operating subsidies to state-owned firms producing autos, steel, ships, computers, textiles, and consumer electronics (*ibid.*).

It is more difficult to obtain information on bailouts of insolvent firms which are continued as privately owned enterprises. Most large commercial and investment banks in France are owned or controlled by the state and, as a result, the primary method of providing rescue aid to

failing firms is through either the banks' forgiveness of existing debts or their agreement to grant additional finance at subsidized rates. The details of these bailout transactions are regarded as confidential information, and public disclosure is usually limited to the identities of the debtor and creditors and the total amounts of finance involved (Zysman 1983).

Industrial policy

To some extent, French industrial policy has evolved in a pattern similar to that identified in Britain, except that the French government has been more successful in withdrawing support from 'lame duck' firms. This brief summary of French policies for declining industries and failing firms suggests that when the state assumes a directing role in economic development, it becomes increasingly difficult for government to avoid political responsibility for enterprise failure and the private hardships of structural adjustment. The next section attempts to identify some of the institutional factors which constrain the French state's ability to withdraw support from sick firms and ailing industries.

In comparison with the other countries surveyed, French industrial policy has placed much more emphasis on the development of plans or strategies for individual industrial sectors. In the period of reconstruction following the war, the Planning Commissariat and the *Tresor* (Treasury Department) allocated scarce investment funds to the six key sectors they had selected for rapid development. During the subsequent two decades, these central-government agencies assumed the task of rationalizing and creating new French industries, principally those producing high-technology goods. Direct grants and subsidized credit were made available to selected firms to encourage mergers designed to create larger sized enterprises capable of exploiting scale economies (Cohen, Galbraith, and Zysman 1982). The magnitude of these state-directed restructuring projects is reflected in the fact that France had the highest rate of mergers in Europe in the postwar period (Zysman 1983). Up to the 1970s, most industrial assistance to selected firms was provided in the form of 'one shot' project-specific loans at subsidized interest rates. This method of providing assistance was facilitated by the government's ownership of controlling interests in virtually all the large commercial banks in France, which were nationalized in 1946 (Estrin and Holmes 1983). French planners also established a series of

specialized credit institutions to provide priority industries and selected firms with access to subsidized credit on a continuing basis. Industry-wide or firm-neutral subsidies such as regional-investment incentives or tax write-offs have been disfavoured by French administrators since these policy instruments do not create any significant leverage to direct or control the business plans of aid recipients (Suleiman 1978). French officials have also stressed the argument that programs to accelerate the development of new technologies were the most effective means of dealing with employment declines in traditional industries.

The French government's restructuring and high-tech promotion strategies of the 1960s and early 1970s assisted in the creation of some very successful enterprises. In many cases, the state drew up 'contracts' with designated firms: the government traded benefits such as public purchasing and price de-control (prices were regulated in France until the late 1970s) for merger agreements that included a commitment to increase investment and improve productivity. The French aeronautics industry has enjoyed many competitive successes in world markets: 'the offshore oil equipment industry is now second only to the US industry' (Magaziner and Reich 1983, 300). By 1985, it is estimated that the French nuclear industry will supply one-half of the country's energy requirements, and will employ more workers than the entire French steel industry. In the auto industry, both Renault and Peugeot have managed strong competitive comebacks after experiencing financial difficulties in the 1970s. Moreover, certain large firms in the electronics, machine-tool, and precision-instruments industries have attained high profits and export sales with the help of French government subsidies for restructuring and retooling (Hayward 1982).

While this list of successful firms and industries is impressive, other instances of selective intervention have led to disappointing results. French planners have failed to create a viable computer industry. CII-Honeywell-Bull, the only French-controlled company producing large-size computers, has a smaller share of the European market than the top three French companies did in 1966 when the government first initiated its efforts to restructure the industry and create a strong national champion. The government has invested more than US \$1 billion in CII projects, but the firm still has annual operating losses and may not be profitable for a long time (Green 1981).

Government efforts to restructure the steel industry have encountered similar difficulties. French planners failed to predict the severe prob-

lems that have afflicted the steel business during the past decade, and continued to invest heavily in steel through the early 1970s. By 1975, declines in world demand made it clear that the French industry was not competitive, despite the almost US \$1 billion of subsidized credit which had been advanced by the government (Brown 1980). In 1978, the government announced that its loans to the two large French steel companies would be converted into equity holdings. These state-owned firms have continued to receive substantial operating subsidies. It is estimated that one-third of the total steel workforce must leave the industry in order to restore its long-run profitability (Cohen, Galbraith, and Zysman 1981). Mass layoffs of this magnitude, in dense concentrations, would devastate cities and regions across France, and would encounter resistance from unionized workers and the Socialist Party. Yet in 1984, the Socialist government was required to announce relatively modest job cuts (6 per cent) in the two large state-owned steel firms as a part of its deficit-cutting program. These cuts, and others in state-owned coal and shipbuilding firms bailed out during the 1970s, are occurring during a period of unprecedented high unemployment and have been denounced by the Communist Party and union leaders (Green 1983).

The political approach

French governments have provided bailout aid to other large firms in the auto, textile, shipbuilding, and coal-mining industries. Interdepartmental committees of ministers and high-ranking civil servants review requests for rescue aid and, in those cases in which aid is provided, determine the conditions that will be imposed on the recipient firm. In most cases, the government's preferred response is to identify a healthy firm in the same industry that is willing to take over the failing firm in exchange for subsidies (Cohen and Gourevitch 1982).

If a merger is not possible, bailout aid is usually provided only on a stringent conditions such as the dismissal of managers and workers and the scrapping of excess capacity. Aid is usually provided in the form of *prêts participatifs*, which are long-term loans that are repayable only if the firm attains a specified level of profitability (Zysman 1983). These instruments are not convertible into equity; the government departments do not require any additional leverage over a bailed-out firm because the firm's other major creditors are invariably the state-owned

commercial banks. French industry derives 80 per cent of its capital from these government banks, and state banks are represented on the interdepartmental committees that decide whether insolvent firms will be reorganized or liquidated (*ibid.*). It is interesting to note that in the other nations surveyed in this chapter, these 'life or death' decisions on insolvent firms are dealt with through negotiation and voting by the creditors. In France there is less need for legal regulation of corporate reorganizations because all the major creditors of a failing firm, with the exception of trade creditors, will invariably be government banks and financial institutions.

Bailout loans to privately owned firms in France are usually granted on a 'one shot' basis, and there have been a number of instances in which the government has refused to provide additional funds to firms which have failed to regain profitability. The Barre government refused to provide additional finance to the huge Boussac textile group when it became insolvent in 1978. Boussac employed over 30,000 workers, and many of its plants are located in depressed regions of the country (Mytelka 1982). The firm was rationalized and its remaining operations were purchased by another privately owned textile firm. In 1981, Boussac's successor firm, Wilmot, failed and in order to prevent layoffs the firm was nationalized by the new Socialist government. Another example of the Barre government's generally tough approach with rescued firms also occurred in 1978 when France's largest shipbuilding firm, Terrin, was allowed to fail and over 4,000 jobs were lost (Curzon-Price 1981). On the other hand, the Barre government nationalized the steel industry, as noted above, and also bailed out several firms in the newsprint, light-manufacturing, and machinery industries. All these successful applicants for bailout aid shared several characteristics. First, they employed skilled workers, most of whom belonged to well-organized unions allied to the Communist Party (Green 1983). Second, virtually all the firms bailed out were located in towns or cities with relatively few other large employers. Finally, most of the firms were located outside the north-central region in economically backward provinces (Hayward 1982).

The Socialist government elected in 1981 has nationalized about five large failing firms during its current term in office. These firms were all manufacturing concerns with more than 1,000 employees; all fit the profile of the firms bailed out by the Barre administration. Mitterand and his ministers contend that many nationalized firms are better

managed than private ones (Green 1983). Nevertheless, the Socialists have insisted that most rescued firms will be sold to private bidders after they are managed back to profitability, and Mitterand has recently announced that the huge French budget deficit precludes any further nationalizations (*ibid.*). The Mitterand government has also introduced more direct participation by workers, unions, and community groups into its bailout deliberations through regional hearings and regular consultations between labour leaders, municipal officials, and central-government decision-makers. Moreover, the Socialists have experimented with government-financed worker co-operatives established to take over the operations of failing firms (*ibid.*).

It appears that the Socialist government's basic method of dealing with failing firms involves the same *ad hoc* and highly politicized approach adopted by its centre-right predecessors. Large firms employing well-organized workers in politically salient regions are bailed out, and sometimes provided with continuing support. Large firms that do not fit the profile, and virtually all small- and medium-sized enterprises, are restructured with a view to future profitability or they are liquidated. The Socialists have also directed most of their industrial assistance to six new 'strategic growth' sectors – telecommunications, microelectronics, nuclear power, aerospace, biotechnology, and undersea research (Magaziner and Reich 1983). Like its more conservative predecessors, the Mitterand government is committed to the view that structural adjustment depends on the creation of new jobs for workers displaced from the declining sectors of the French economy.

In contrast to West Germany or Britain, there is no single union confederation in France. The French union movement is comprised of three factions – Communist (CGT), noncommunist but radical (CFDT), and moderate (FO). These factions are organized as weak federations which cut across industry lines and, as a consequence, they often compete to organize large plants. This internal conflict has limited the capacity of French labour to co-ordinate its economic and political initiatives, and to sustain the type of corporatist arrangements employed in West Germany. Moreover, the fragmented structure for decision-making within French unions has weakened their political influence on issues of concern to all French workers, such as anti-inflation measures and programs to promote labour mobility (Zysman 1983).

There have been some exceptional cases in which the unions have presented a united front in negotiations with employers and the gov-

ernment. Beginning in the late 1960s, special collective agreements have been concluded covering all the firms in the textile and steel industries. Unlike most French industries (which have an average unionization rate of only about 25 per cent), more than 80 per cent of the employees in these two industries are union members. The industry-wide agreements establish entitlements to retraining and severance payments, and also require advance notice for mass dismissals and establish early retirement programs for older workers. It should be noted that these special agreements are also partially attributable to strong government pressure on these industries to reduce their workforces (Hager 1981).

Labour-management relations at the firm level differ widely between industries and geographic regions in France. Collective bargaining through plant or firm unions has been guaranteed by legislation since 1968, but only about 25 per cent of French industrial workers belong to unions and most union membership is concentrated in a few industries (e.g., steel, autos, textiles, and shipbuilding). In nonunionized firms, employees lack any formal representation in company decision-making. In some unionized firms, 'work councils' incorporating employee representatives participate in making decisions on mass dismissals, such as the timing of layoffs, the provision of retraining and relocation assistance, and entitlements to severance allowances (Reich 1985, 217-18). Even in organized firms with strong unions, key decisions concerning processes of production, location of plants, and expansion or contraction of activities are often taken by management with little or no consultation with workers. It has been argued that the lack of arrangements for labour participation in company policy-making has led to a system of rigid work rules and inflexible work assignments that has retarded positive adjustment in French industry. Zysman states:

Compared with Germany, for example, the labour system in France remains extremely rigid. In comparisons of matched factories it has been found that the blue-collar organization in French firms is marked by a more rigid internal hierarchy and a greater inequality of salaries than one finds in German firms. (Zysman 1983, 165-65)

There is no strong encompassing organization for representing the interests of French business in the government departments that deal

with industrial policies. The main peak organization is the *Conseil National du Patronat Français* (CNPF), a loose confederation of trade associations organized along industry lines. Most lobbying and formal contacts with government officials are carried out by the trade associations or by large firms themselves (Hayward 1976). The fragmentation of both business and labour organizations in France has blocked the evolution of tripartite or corporatist arrangements for consultation on major economic issues.

The most striking characteristic of the French political constitution is the extent to which power is centralized in the president (Wright 1979). Like his American counterpart, the French president is both the political and administrative leaser of his government. Unlike the US president, the French chief executive exercises considerable power over the legislature. In France, the President appoints the prime minister and all other ministers, holds the power to dissolve the National Assembly and call elections, and directly controls all the patronage appointments and party funds that can be employed to secure the co-operation of legislators (Suleiman 1981). The President is assisted by a large elite staff which carries on the primary work of French government through consultations with a series of interdepartmental committees. These committees, which can range in size from five to thirty members, are designed to co-ordinate the policies of the ministers or line departments. The first of these bodies was the Inter-ministerial Committee for the Adaptation of Industrial Structures (CIASI) which was established in 1974 to co-ordinate bailouts of failing firms. In the CIASI (renamed CIRI under the Socialists), the largest bailout cases are handled by ministers or their deputies, whereas smaller bailout candidates are dealt with by representatives of the ministries at the local level.

The CIASI, and three other inter-ministerial committees established during the mid- and late 1970s, were designed to counteract the dispersion of industrial-policy functions in the central bureaucracy. Legal responsibility for industrial-policy instruments is fragmented among several strong departments with divergent political constituencies. For example, the Ministry of Industry has primary responsibility for industrial policy, but it must work within the expenditure budget controlled by the *Tresor* (Treasury) and must negotiate with other departments responsible for key industries, e.g., Transportation, Defense, and Agriculture. Green's work on French industrial policy argues that creation of the CIASI, and the other interministerial com-

mittees, has a significant positive impact on the substantive coherence of central government intervention:

The multiplicity of agencies in the industrial policy process and a concomitant compartmentalization of the machinery of government militated against any real co-ordination of policy. The creation of powerful inter-ministerial committees made it possible to short circuit cumbersome administrative procedures and squabbles over jurisdiction. A further advantage is that, broadly speaking, there is a common membership of the main committees that furthers informal communication and understanding. The inter-ministerial committees are at the heart of French efforts to manage industrial crises. Ostensibly, they constitute an imaginative and highly appropriate innovation within a tradition of state responsibility for industrial success. (Green 1983, 175)

CONCLUSIONS

This final section summarizes the main similarities and differences in the national bailout policies surveyed in this chapter. The major points of comparison comprise:

- 1 the relative frequency of bailouts;
- 2 the types of firms receiving bailout aid;
- 3 the policy instruments used to bail out insolvent firms
- 4 the performance conditions attached to bailouts by national governments.

A comparative analysis of the data indicates that some nations seem to invest more physical and political resources in promoting wealth-maximizing adjustment while others tend to select bailout policies that operate to preserve the industrial status *quo ante* and reduce potential national wealth. One important piece of corroborative evidence is that national differences in per capita wealth and productivity growth rates seem to track differences in the general orientations of national industrial policies – whether they promote or retard market adjustment. The final part of this section evaluates the comparative evidence from the standpoint of the positive explanations outlined in the introduction

to this chapter. What structural features of national institutions tend to generate private behavior and public policies that promote positive adjustment to market changes? Unfortunately, the evidence is somewhat contradictory on the tendency of institutional structures to promote wealth-maximization; strong conclusions cannot be drawn from the limited information surveyed in this chapter.

Incidence

The evidence on the relative frequency of bailouts indicates that Britain and France grant bailout aid more often than Japan, and that Japan in turn provides rescue aid to insolvent firms more frequently than either West Germany or the United States. Given the limited amount of information available about bailouts in Japan and France, it would be difficult to defend any more refined conclusions concerning the relative incidence of bailouts among these countries. One possible explanation for this ranking is that countries which grant bailout aid less frequently will also tend to adopt pro-adjustment, wealth-maximizing policies. Yet the United States, which is probably the nation that has granted bailout aid least frequently, has consistently deployed protectionist, adjustment-retarding subsidies and regulations in response to industrial crises (e.g., steel, autos, shipbuilding, textiles, clothing, and footwear). And France, a faster-growth country which has generally directed its subsidy and regulatory policies toward market-led adjustment, has been an active grantor of bailout assistance. There is little support for the view that a noninterventionist policy stance tends to be associated with a strong collective preference for wealth-maximizing policies toward industry.

The relative frequency of bailouts probably reflects two national characteristics that are primarily separate and independent from national policy preferences and institutions. First, the general condition of the national economy during the period surveyed would have a substantial influence on the private costs of adjustment to market changes. There is evidence to support the view that the British and French economies confronted more serious structural unemployment problems than the other three nations, and this could explain the higher incidence of bailouts in those two countries (OECD *Economic Outlook*, 1977, 1984). The second national characteristic is the general propensity of governments to intervene in industrial affairs, whether on the side of market-led adjustment or against it. West Germany and the United

States possess constitutional systems which reduce the rate and scope of government intervention through various types of 'check and balance' mechanisms – two co-ordinate levels of government with shared jurisdictions, and executives with political support that is independent of ruling legislative majorities. The argument would be that West Germany and the United States bail out less frequently because their political institutions contain a structural bias in favour of nonintervention, and not because both nations' policies place an equal amount of emphasis on positive adjustment and national wealth maximization.

Types of firms

There seems to be a great deal of similarity in the types of companies which have received bailout aid in these five nations (Reich 1985, 222-24). Most bailout aid goes to manufacturing firms with large, regionally concentrated and unionized workforces. Moreover, requests or demands for bailout aid are invariably regarded as extraordinary or nonroutine decisions which are properly reserved for the highest levels of the executive, and sometimes require special legislative action. In short, the vast majority of insolvent firms are not bailed out in any of these countries. There is little evidence to support the view that bailouts during the past decade signal a shift toward the systematic 'socialization of market risk' (Courchene 1980).

The cross-national record on bailouts suggests that public-choice explanations concerning the political dominance of concentrated producer groups may shed light on this apparent discrimination in favour of large failing firms. As indicated earlier in the chapter on political explanations for bailouts, vote-maximizing politicians are more likely to accede to the bailout demands of large firms capable of enlisting the strong support of adversely affected communities, upstream and downstream industries, and numerous employees. It also seems plausible to explain consistent discrimination in favour of large employers located in congested regional labour markets as evidence of similarly strong national preferences for wealth-maximizing policies toward industry. This apparent similarity is not confirmed when other aspects of national industrial policies beside bailouts are examined.

Instruments

One broad similarity in the bailout instruments employed by these five countries was the preference of governments for loan guarantees or other legal arrangements which in effect entail the governments' pledge to compensate private sectors. In Japan and France, the governments' ability to direct the supply of bailout aid through state-owned or controlled banks makes bailouts less politically visible by restricting the flow of information to potential opponents. Loan-guarantee agreements tend to be favoured in Britain and the United States because they involve no immediate payout of government funds and, it is argued, are therefore more acceptable to taxpayers. Whether the government owns the bank or directs their policies or simply guarantees their loans, the main objective of most governments seems to be the avoidance of public controversy in their choice of bailout instruments. The main exception here is West Germany, which has often employed 'one shot' cash grants in bailing out insolvent firms, and assistance paid directly to displaced workers.

A significant difference was revealed in the identities of the beneficiaries of bailout aid in the cases surveyed. When large firms in Japan and West Germany fail, governments tend to direct as much assistance to adversely affected communities and employees as to the insolvent companies. This is also true, to a lesser extent, in France, where regional-development and labour-adjustment policies have been expanding during the past decade. In British and US bailouts, the vast majority of assistance goes to firms and little aid is channeled into labour-adjustment programs or the creation of new jobs in the affected region.

Conditions

All five governments imposed conditions on firms receiving bailout aid, and these conditions dealt with two basic questions:

- how much of the potential losses confronting investors and employees would be borne by them rather than the government?
- what positive steps would be taken by the firm to restore profitable operation?

In Britain and the United States, government negotiators placed much emphasis on wage and benefit concessions, debt write-downs and contributions from suppliers and customers of the failed firm. While these questions of loss allocation do not seem to receive as much public attention in the other three nations, there is no basis for concluding that employees or investors received more generous treatment in these countries. For example, Japanese workers may have more job security in bailout situations, but they will usually be required to accept deep pay cuts or transfer to an unfamiliar job in another city.

The primary difference in bailout conditions is the extent to which emphasis is placed on positive adjustment as opposed to cushioning private losses. While all countries have required restructuring or rationalization commitments from bailed-out firms, France, Japan, and West Germany seem to have had relatively more success in enforcing these conditions and promoting rapid adjustment. One reason for this relative success may be the presence of other public and private arrangements that operate to reduce the private costs of adjustment. National differences in bankruptcy laws, financial markets, and labour-adjustment policies may explain why investors and employees tend to be more or less responsive to market incentives in these five countries. These laws and policies that shape private responses to market changes are themselves the product, at least to some extent, of the basic structural characteristics of national institutions. What features of British and US institutions weaken political support for pro-adjustment policies? Why have Japan, France, and West Germany had relatively more success in maintaining dominant political coalitions favouring wealth-maximizing industrial policies?

Worker participation in company decision-making tends to be more prevalent in West Germany and Japan than in the other three nations surveyed. It can be argued that arrangements which provide workers with greater influence over firms' policies will also promote co-operative attitudes toward sharing the burdens of adjustment, and that this labour-management consensus will provide the necessary political support for bailout agreements and industrial policies designed to promote rapid adaptation to market changes (Reich 1985, 118-19). The evidence on West German and Japanese bailouts and industrial policies tends to confirm this hypothesis on the overall effect of labour-management power-sharing, but France stands as a counter-example. Codetermination arrangements are rare in French industrial firms, and

yet successive French governments have deployed bailout plans and other policies aimed at speeding up the pace of industrial transitions. Nevertheless, the evidence does provide limited support for the view that the absence of labour-management power-sharing in British and US firms tends to undermine any strong consensus among investor and employee groups in favour of pro-adjustment policies.

The second hypothesis concerns the causal link between the presence of strong corporatist arrangements at the national level, and the government's apparent willingness to adopt policies that promote adjustment to market forces. The evidence from West Germany indicates a positive correlation between corporatist institutions and wealth-maximizing industrial policies, and the evidence from Japan also lends some support for this hypothesis. While Japanese trade associations and political parties tend to have centralized federal structures, the labour movement is more fragmented and wields less political influence than German labour. On the other hand, the absence of corporatist arrangements in France, a faster-growth nation with a demonstrated willingness to adopt positive adjustment policies, tends to raise doubts about the policy consequences of corporatist structures. It may be that the absence of corporatist institutions in Britain and the United States provides a partial explanation for the relative willingness of their governments to adopt adjustment-retarding policies, but the evidence from this study does not provide much support for this claim.

Finally, it was suggested that the degree of centralization of government policy-making exerts influence on the kinds of bailout policies that national governments tend to adopt. The hypothesis is that unitary states with centralized executive structures tend to be more resistant to demands for bailouts and other interventions aimed at preserving the industrial status quo. The evidence from France and Japan tends to confirm the hypothesis, but there are also two counter-examples which undermine the persuasiveness of this explanation. West Germany – a faster-growth nation which has tended to stress positive adjustment policies – is a federal state with two co-ordinate levels of government actively involved in formulating and administering industrial policy. Moreover, Britain is a unitary state and its cabinet exercises virtually autonomous control over industrial subsidies, and yet successive British governments have tended to adopt adjustment-retarding policies often in the form of bailout assistance.

Prescriptive implications for bailout policies in Canada

INTRODUCTION

In evaluating the possible prescriptive implications of our analysis of the political economy of business bailouts in Canada, bailouts by government can be viewed most usefully in the context of economic and political mechanisms that shape the economic-adjustment process. The dominant economic objective of such a process is presumably to facilitate the movement of resources from declining sectors to expanding sectors reflecting technological changes, shifts in comparative advantage, changing consumer tastes etc. (i.e., factors that change relative prices). This reallocation of resources from lower- to higher-valued uses enhances their productive potential and maximizes the long-run output of the economy.

Unfortunately, however, the process of adjustment is likely to generate transitional losses that often will fall unevenly on different subgroups within the economy. This effect may induce perceptions of social injustice and opposition to the adjustments. In extreme cases, such opposition may take the form of political vetoes. As Lester Thurow argues in his recent, popular book, *The Zero Sum Society* (Thurow 1980), in the past, failure by policy makers, especially economists, to address the distributional impacts of change often has prevented or deferred adjustments that would benefit the community in the long run as the losers translate their sense of grievance into political opposition.

The socialization of market risk, as Courchene has termed it (Courchene 1980), may, at a general level, be one of the most striking shifts in public policy-making in Canada in the post World War II period. While evidence of the same phenomenon in earlier periods of Canadian history was noted in Chapter 2, since 1945 there has been massive growth of both social-welfare programs directed to individuals and industrial-assistance programs directed to firms, along with the deploy-

ment of activist Keynesian stabilization policies and the emergence of strong regional-development pressures and policy responses thereto. These conditions have made it increasingly difficult politically for government to renounce responsibility for the performance of either the economy at large or particular sectors.

These political pressures may make some of the recent bailouts politically rational as welfare responses in an open economy with a decentralized and diffused political structure and fragmented labour and business organizations; these circumstances make it more difficult to forge less *ad hoc* policy responses to the economic and social consequences of recession. The absence of more inclusive political institutions and interest groups may lead unavoidably to an emphasis on highly partial perspectives (M. Olson 1982; Reich 1983b). Alternatively, one can view at least some of the recent bailouts as attempts to buy off potential political vetoes of more general shifts in economic policies (e.g., macroeconomic policies, including higher interest rates) that may be in the long-run economically desirable. In this sense, some bailouts may represent a rational reconciliation of economic, distributional, and political considerations. However, the fact remains that recent bailouts are highly *ad hoc* and diverse in nature and are difficult to rationalize in terms of any overarching industrial strategy.

This stands in sharp contrast to crisis assistance by Canadian governments to failing firms prior to World War II: the canals, the railways, and the wheatpools were intimately linked to the country's National Policy, and their development and maintenance was widely perceived as providing central infrastructural underpinnings to the political and economic integration of the nation along an east-west axis. This chapter addresses the question of whether with respect to failing firms a better reconciliation of economic and political features of the adjustment process can be achieved than that reflected in existing bailout policies.

In evaluating possible improvements in existing government policies or practices, three separate areas of policy-making can be isolated:

- 1 policies that facilitate private adjustment processes and reduce the incidence of bailout candidates;
- 2 policies that determine which residual failing firms should receive government assistance of some kind;
- 3 policies that influence the choice of particular instrument of assistance, once a decision to intervene in principle has been taken.

REDUCING THE INCIDENCE OF BAILOUT CANDIDATES

While a detailed discussion of the complex question of the role of public policy in facilitating 'downside' or negative adjustment is beyond the purview of this study, there are a number of marginal policy shifts that may improve the performance of labour and capital markets and thus reduce demands for rescue aid.

Bankruptcy-law reform

Analysis earlier in the study suggested that strategic behaviour is most likely to be a serious impediment to an efficient resolution of the creditors' collective-choice problem when two conditions are satisfied. First, there must be major creditors with quite different levels of exposure to default risk, at least one of whom has relatively little to lose from immediate liquidation. Second, there must be a fairly large number of diverse creditors involved in the negotiations. When these conditions exist, there is a risk that bargaining costs and free-rider problems may block a value-maximizing reorganization of an insolvent firm. This risk seems most likely to result in premature liquidation when a secured creditor removes key assets from a failing firm. The secured creditor's decision to 'pull the plug' may be motivated by legitimate concerns about the debtor's viability and the protection of its own security. On the other hand, the decision may be a tacit or explicit attempt to extort a bribe from the creditors, whose claims would be worth more if the debtor's business were continued. The targets of extortion may fail to agree on a method for allocating the cost of paying the bribe, and the insolvent firm will be wound up. Moreover, strategic behaviour may lead to wasteful delays in the bargaining, even if the efficient allocation of the debtor's assets is ultimately chosen by the creditors.

The efficiency rationale for government intervention depends on the assumption that it would be too costly to hold an *ex ante* meeting of all a debtor's creditors to agree on appropriate controls for strategic behaviour. It seems inherently difficult to design ways for making credible commitments not to behave opportunistically in the event of insolvency. The efficiency argument for intervention also depends on the highly plausible assumption that the successful conclusion of a reorganization agreement *after* insolvency ensues may often be difficult and costly. But the case for regulation also depends on the direct and indirect costs of the legal mechanisms that are used to control opportunism.

Two basic approaches to regulating insolvency negotiations can be distinguished. The first depends on timely intervention by some external reviewer, either a judge or public official. This is the federal

government's preferred approach to dealing with strategic-behaviour problems in large-firm insolvencies. The most recent version of the government's bankruptcy bill proposes that bankruptcy court judges be authorized to impose reorganization agreements on unwilling creditors when it is in the 'community interest' to do so (Bill C-17, A Bill for An Act Respecting Bankruptcy and Insolvency, 31 March 1984, s.120). While the existence of the government's proposal at least indicates some measure of public concern for the effects of strategic behaviour in insolvencies, this approach to regulatory reform seems inadvisable. Moreover, it seems unlikely that bailout subsidies are the best remedy for premature liquidations and protracted bargaining stalemates. The effectiveness of both bailouts and judicial intervention depend on the ability of public officials to identify cases of strategic behaviour. Unreasonable or extortionate demands in insolvency negotiations are not usually easy to recognize, and may often be feigned if it becomes public knowledge that they will attract a subsidy. The inherent difficulty and costliness of attempting to assess the reasonableness of opposing creditors' bargaining positions suggests that neither bailouts nor judicial intervention are likely to be superior to the alternative of doing nothing about the costs of creditor opportunism.

The second approach is to design procedural rules which strike an optimal balance between the expected costs of strategic behaviour and the direct and indirect costs generated by the rules themselves.

Analysis earlier in this study suggested that the main problem with the existing legal scheme is that some of the legal mechanisms for controlling strategic behaviour generate indirect costs that would appear to exceed their probable benefits. The main target for reform should be the secured creditor's 'exit option' which provides a powerful weapon for fully secured creditors seeking to extract more than their rightful share of the debtor's property. In other words, the exit option provides an excessive level of protection from majority exploitation of secured creditors because it encourages a more costly form of strategic behaviour - holdouts by fully secured creditors that delay or block efficient re-organizations. The United States has employed a mandatory-inclusion rule for secured creditors for more than fifty years. This is a major feature of Chapter XI of the current US Bankruptcy Act (Blum and Kalven 1976). Recent proposals for the reform of British bankruptcy law would subject secured creditors to an automatic stay of up to six months on the enforcement of their claims (Goode 1983-84). While the British reforms would not require that secured creditors participate in reorganization arrangements, the proposed automatic-stay rule would create a strong incentive for them to do so. The automatic-stay rule is a fairly close substitute,

from a practical viewpoint, for the US mandatory-inclusion regime discussed in an earlier chapter of this study.

A second priority for bankruptcy-law reform is improving the existing voting rules. The present rules require that 75 per cent of the total value of each priority class's claims must be voted in favour of reorganization for a proposal to succeed. On the other hand, only 51 per cent of the claims of each class are sufficient to force a liquidation or going-concern sale. A second important difference between proposal and bankruptcy proceedings is that a simple majority of the creditors (i.e., one person or firm – one vote) must lend their support in order to reorganize the debtor. Now, the only kind of voting in bankruptcy cases is by weighted votes (i.e., about one vote for each \$1,000 of claims). There is no rational justification for this additional voting procedure in reorganizations. Allocating voting power on any basis other than the size of a creditor's stake seems arbitrary and unfair. Moreover, there is some evidence that the dual-voting requirement in proposal proceedings allows creditors holding small claims to, in effect, sell their votes to the proponents of the reorganization plan.

Several recent successful proposals have provided for payment in full of all claims up to \$2,000. It may be efficient to pay off small creditors in full if the costs of administering their participation in the reorganization are likely to exceed the face value of their claims. However, it is difficult to believe that the costs of reorganization, at least the costs attributable to those with small claims, would amount to \$2,000 per creditor. Perhaps a more likely explanation for this solicitude on behalf of small creditors is that they have relatively little to lose from immediate liquidation while the proponents of reorganization stand to suffer large losses. The dual-voting rule – 75 per cent of the claims and a simple majority of the creditors – provides small creditors with a powerful weapon for extorting more than their rightful share of the debtor's property. An examination of creditor lists in two recent successful proposal cases seems to confirm this concern for strategic behaviour by small-claim creditors. In both cases, the amount of the cash payoff seemed to be determined by the median value of creditors' claims (Clarkson Co. 1982, 1983). In other words, the payments were designed to secure the support of a simple majority of the creditors, and not to reflect some minimum amount of administrative expense that would be cheaper to avoid. Since there is no rational justification for the dual-voting requirement, and it may produce some holding out by small-claim creditors, it should be repealed.

Finally, there is the question whether a supramajority voting rule (i.e., 75 per cent of claims) or a simple-majority rule (i.e., 51 per cent of claims) should be adopted for reorganization proposals. The earlier

analysis suggested that there are plausible arguments in favour of both rules. Other developed countries have adopted supramajority voting rules, but there are substantial differences in the level of supramajority support required. For example, United States law requires that the holders of 66 per cent of the claims of each priority class must vote in favour of reorganization; in West Germany 80 per cent support is required in order to effect a valid reorganization. In light of this mixed evidence, there is no strong case for reducing the present rule's margin of creditor support required for reorganization.

Merger policies

The acquisitions of a failing firm by a financially stronger enterprise may often be the socially efficient method of achieving structural adjustment. Policies that make mergers more difficult or costly discourage the redeployment of entrepreneurial talent. Three specific types of regulation have the potential for discouraging significant numbers of mergers in Canada. First, the Combines Investigation Act authorizes criminal-court judges to prevent mergers that are 'likely to substantially lessen competition' (RSC 1970, C. 23, 32 and 333). Secondly, the Investment Canada Act requires the federal Cabinet to review proposed takeovers of larger Canadian businesses (assets of \$5 million or more) by foreign investors, and to permit those investments which 'are likely to be of net benefit to Canada' (Bill C-20, Investment Canada Act, enacted 22 May 1985). Finally, provincial-securities laws impose costly conditions on takeover bids as a result of their 'followup offer' provisions. For example, the current followup-offer rule in Ontario requires that when an offering firm makes a takeover bid, in the form of a private offer to investors in control of the target firm, and the bid is at a premium above the current market price of the target's shares, the offering firm must also make an offer of equivalent value to the target's remaining shareholders (Ontario Securities Act, RSC 1980, c.466). In short, once the followup-offer obligation is triggered, the offering firm must purchase 100 per cent of the target firm's shares (Ontario Securities Act Regulations, R.R.O. 1980, regs. 910 and 163[3]). This restriction can prove very costly to an acquiring firm.

Each of these three laws operates to impose regulatory constraints on acquisitions for what are regarded, at least by existing federal and provincial governments, as legitimate policy objectives – the promotion of market competition, the reduction of foreign control over businesses operating in Canada, and the protection of minority investors in publicly traded firms. The social benefits from pursuing these goals may often be substantial but public decision-makers should also take account of the

tendency of these policies to increase the costs of achieving efficient market adjustments. The prohibition or discouragement, through cost-increasing regulations, of mergers involving failing firms may be especially costly because voluntary reorganizations, which would be warranted on allocative efficiency grounds, may be blocked by strategic-behaviour problems. When reorganization cannot be achieved, the insolvent business will be liquidated (i.e., sold piecemeal) unless a willing merger partner can be found.

Existing Canadian competition law adopts a very permissive approach to mergers and it seems highly unlikely that Canadian courts would interpret the statute to block mergers involving failing firms (Quinn 1979). The Foreign Investment Review Agency (FIRA), the body that, until recently, advised the federal Cabinet on proposed foreign takeovers, had no formal policy on mergers involving failing firms. Of the bailout cases reviewed in this study, only the White Farm Equipment insolvency involved active intervention by the Agency. The evidence from that case indicates that the Agency discouraged several European and American bidders who balked at the prospect of entering into a joint-venture arrangement with a Canadian partner. The Mulroney government's replacement for FIRA, named Investment Canada, will continue to review foreign-takeover bids for firms with more than \$5 million in assets. Finally, provincial followup-offer regulations would appear to operate as costly impediments to mergers in a significant number of cases involving failing firms. While the Ontario Securities Commission does have the statutory authority to grant exemptions from the followup-offer rules when the 'public interest' requires such action, it has refused to grant exemptions in several cases involving failing firms (Willoughby 1983; Ontario Securities Commission 1980). Based on the limited evidence available, it would seem desirable for federal and provincial merger regulations to contain express provisions requiring judges and administrators to take account of adjustment-cost considerations and, in particular, to grant exemptions for failing firms when transition-cost savings from avoiding liquidation are likely to be substantial.

In the past decade, the takeover bid, which involves an offer to purchase made directly to the shareholders of an offeree or target firm, has been used with increased frequency, and has become a significant feature of the Canadian market for corporate control (Ziegel 1979; Gorecki and Stanbury 1979). The takeover bid's central role in the process of economic adjustment derives from its impact on the allocation of entrepreneurial and managerial talent. A tender offer directly to the shareholders is employed when the target firm's directors are opposed to a transfer of control to the offering firm. In a sale of assets or statutory

amalgamation, the directors of the combining corporations must agree to the merger before presenting it for approval by the shareholders of the affected corporations. Thus, an acquiring firm must either reach a compromise with the target's incumbent management or purchase a controlling interest in the target firm, thereby obtaining the legal right to replace the incumbents.

The most plausible economic explanation for unfriendly takeovers, which are substantially more costly to carry out than negotiated mergers, focuses on their role in controlling 'agency costs' in large publicly traded firms. In these large corporations, a non-negligible part of the benefit created by each manager's effort enures to the shareholders, the principals whom the managers or agents are legally bound to serve. Because managers do not receive the full benefit of their work, they have some incentive to shirk their responsibility to maximize the value of their principals' equity holdings. While shareholders might be able to obtain substantial gains from improving the performance of their managers, collective efforts to reduce agency costs will usually be difficult to organize because of high transaction costs and free-rider problems (Easterbrook and Fischel 1981). Successful internal campaigns against managers are rare, and most of these succeed only because one or two dissident shareholders own large blocs of stock. Since shareholders are unlikely to provide the necessary supervision, tender offers provide a vehicle for outsiders to influence the performance of corporate management. When the difference between the market price of a firm's shares and the price those shares might have under different management becomes substantial, outsiders can profit by buying control and appointing superior managers.

The agency-costs explanation of takeover bids suggests that the directors of a target firm must confront a serious conflict of interest in deciding to support or oppose a tender offer. The directors have a legal obligation to act in the best interests of their shareholders in framing their response to a tender offer but also have a personal concern for retaining their positions which may be sufficiently strong to influence their judgement. If the management of a target firm is accorded broad discretionary powers to deter or defeat tender offers, there will be serious risks of unfairness to shareholders and lost opportunities for the efficient redeployment of entrepreneurial resources. In recent years, Canadian directors have employed several defensive manoeuvres designed to discourage or prevent takeover bids. Some strategies aim at discouraging takeover bids by creating legal restrictions on the ability of new owners to effect major structural changes in the target firm or maintain existing contractual relationships with employees, creditors, and

suppliers. 'Shark repellent' provisions may be added to the target firm's by-laws or articles of incorporation; these rules typically increase the margin of shareholder support required for the approval of mergers or other major alternations in the firm's structure or operations. They deter takeovers by, in effect, forcing an offeror to purchase more than a simple majority of the shares to obtain the margin of control necessary to reorganize the target firm. Similarly, agreements with lenders, suppliers, and trade unions can be drawn to discourage takeovers by imposing costly burdens such as contract termination or renegotiation provisions which are triggered by a change in control of the target firm.

Other defensive measures are used to defeat a takeover bid after the offer has been made to shareholders. For example, the directors of a target firm may attempt to increase the number of shares outstanding and thereby make it more difficult for the offeror to acquire control. Another strategy is for the directors or their associates to purchase additional shares of the target firm to increase their combined holdings to a control position, or to cause the market price of the shares to increase and undermine the attractiveness of the offeror's bid.

Legal debate has focused on the question of how closely the courts should scrutinize transactions or procedural changes which, because of their timing or content, suggest that the directors are employing defensive tactics. Although there are some decisions which have found particular defensive tactics to be unlawful, other courts have held that directors have the right to take reasonable steps to resist takeover bids which they believe are not in the best interests of shareholders (Iacobucci 1981). Unless there is some evidence of fraud or bad faith, the courts will generally refuse to scrutinize the merits of the directors' justification that the tender offer is too low.

Several academic commentators have criticized this permissive approach on the ground that it gives too little weight to the acute conflict of interest involved for target directors; they argue that the target management should bear the burden, unassisted by any presumption of reasonableness, of proving that the defensive measures taken were in the best interests of shareholders. Iacobucci argues that 'the directors should not take any specific action that would frustrate the takeover bid or deny the shareholders the opportunity to accept or reject the bid, although they can disapprove of a bid and communicate that disapproval to the offeree shareholders' (Iacobucci 1981, 165). Iacobucci's 'rule of passivity' would provide shareholders with enhanced protection against managerial self-seeking and facilitate the efficient reallocation of managers. If the courts fail to apply this stricter standard to govern the defensive actions of target directors in future cases, it would be desirable to amend

existing corporate and securities legislation to expressly adopt a rule of managerial passivity.

Tax policy

When a large corporation becomes insolvent, the firm is likely to have net operating losses accumulated from prior loss-making tax years. The rules governing the deductibility of such losses for corporate-tax purposes are based on the concept of income averaging (i.e., the idea that taxpayers whose incomes fluctuate from year to year should receive tax treatment equivalent to those with stable incomes). However, the existing Canadian rules fall short of achieving true neutrality with regard to operating losses in that they can be carried back one year and carried forward five years from the tax year in which the loss was incurred (Income Tax Act, s.111[1][a]). The effect of these temporal restrictions on deductibility is that when a company experiencing net operating losses does not earn a profit equalling the amount available for offset over the six-year period prescribed by the Act, the loss expires without having been deducted by the company. Under such circumstances, some of the expenses of earning income (i.e., the unused loss deductions) will not have been deducted, and to that extent, the income tax on that business becomes a tax on its capital. In other words, the restricted availability of carry-overs effectively imposes a 'double tax' on certain loss corporations, and results in unfairly disparate tax treatment of corporations by favouring large, long-established and diversified firms (i.e., those entitled to file consolidated returns). Critics of the current scheme have argued that in order to refine the concept of net income in accord with the income-averaging concept, net operating losses should be treated under a 'loss recoupment' system (Bravenac and Fraser 1977). Under a policy of recoupment, firms sustaining net operating losses would be entitled to receive a refund from the public treasury for the 'tax value' of such losses.

As an example of the recoupment system, suppose that the expenses of business enterprise – a bakery – exceed its revenues by \$15,000 in the 1980 tax year. Under the existing system, the firm pays no tax, but obtains a tax benefit for its loss in the form of a deduction that reduces the tax on its income in three situations. First, if the bakery had profits in 1979, the Act provides that the 1980 loss of \$15,000 can be carried back against the income of that earlier year. If the bakery had taxable income of, say, \$20,000 in 1979, then the 1980 loss would be offset against that amount. The bakery would be deemed to owe taxes on only \$5,000 (\$20,000 less \$15,000) for 1979. If we assume a flat rate of 46 per cent, the bakery's 1979 tax liability would be recalculated downward,

from \$9,200 to \$2,300 as a result of the offset. Therefore, the firm would receive a refund from the Department for the difference – \$6,900, which is 46 per cent of the 1980 loss of \$15,000.

If the bakery had no past earnings, it would next have to look to the future to use its net operating loss. If it earns a profit in 1981, it can carry forward its 1980 loss to offset that income. For example, if the bakery's taxable income in 1981 is \$20,000, then, as before, the bakery will have to pay only \$2,300 taxes (tax due on \$5,000) rather than \$9,200 (tax due on \$20,000). The firm receives a savings of \$6,900 in the form of a 'credit' against its subsequent tax liability, in compensation for the prior year's loss.

Finally, if the bakery is part of a chain operated by the same owners, either through a number of corporate entities or as one among several divisions of a corporation, then the income from other profitable bakeries or divisions can be combined with the loss from the unprofitable bakery in one tax return. If the bakery has no past or future earnings, and no affiliation with more profitable businesses, then the \$6,900 tax savings on the 1980 loss cannot be realized. Under a system of uniform recoupment of losses, however, no such discrepancy in tax treatment would arise.

With recoupment, all firms that sustain operating losses would be entitled to receive, in the tax year of the loss, a cash refund from the Department equal to the 'tax value' of the loss – that is, the amount that the business would have paid in taxes on a profit equal to the loss, or equivalently, the dollar value of the loss multiplied by the applicable tax rate. To continue our example of the bakery, that business would receive, as a refund from the public treasury, \$6,900, just as it would have paid \$6,900 in taxes had it earned a net income of \$15,000 in 1980. Recoupment would eliminate the discriminatory effects of the present carry-over system. The current provisions for loss carry-overs and consolidated returns have the effect of favouring established firms over new ones, and large conglomerates over small, nondiversified firms. As a result, recoupment exists, in fact, for the former types of businesses but not for the latter.

Some may argue that it does not seem 'fair' to give a refund to firms that have only sustained losses and never paid any income taxes. Yet the Act's basic premise of fairness is that ability to pay is best reflected by a taxpayer's net income (Musgrave and Musgrave 1980). This premise, in turn, requires deducting *all* costs of income production for all taxpayers, regardless of their contributions to tax revenues in other years. Other critics of the recoupment proposal have argued that it is a negative income tax for business. This perception of the proposal rests on an

incorrect analogy; the conceptual underpinnings, function, and operations of the two proposals have been shown to be entirely distinct. Recoupment is not a subsidy device, but a means of achieving equity among taxpayers and neutrality among different types of businesses. Another objection is that a recoupment system would encourage firms to contrive artificial business losses that would support refund claims. Moreover, it is plausible to argue that the availability of loss refunds would create major moral-hazard problems and induce managers to invest in excessively risky projects. While recent studies conclude that these deficiencies of recoupment would not outweigh its benefits, more research in a Canadian context is probably required before a serious reform effort is launched (Compisano and Romano 1981). Recoupment would certainly reduce the incidence of bailout candidates by providing failing firms with injections of cash when their financial problems are likely to be most severe.

A related tax problem for failing firms concerns present restrictions on the transferability of loss deductions. The most significant restriction imposed by the Act concerns the 'continuity of business' rules applied in mergers involving loss-firms. If control of a loss-making firm changes during a tax year, the losses carried forward from previous years will only be deductible in that year or following years where the firm continues to carry on the business which gave rise to the accumulated losses (Income Tax Act, s.111[5]). This continuity rule is designed to reduce the scope for trading in loss companies, but it has the undesirable effect of discouraging some mergers involving failing firms. If a failing firm is, in fact, to be acquired strictly for the value of its loss deductions, the transaction will have no effect on the final disposition of the firm's assets. The problem arises when the management of the acquiring firm wishes to alter the nature of the target firm's business in order to restore the firm's profitability. In these types of mergers, strict applications of the continuity-of-business rules could discourage many mergers that would increase economic welfare. While there is no evidence that the continuity rules have been applied in the past to block efficiency-promoting acquisitions, there is a case for amending the existing rules to ensure that they will be applied with flexibility and sensitivity to adjustment considerations in failing-firm situations (Bittker and Eustice 1979).

Labour-oriented adjustment policies

There are compelling economic and equity arguments for facilitating the reduction of labour employed in declining sectors by cushioning the costs of transition involved in redeployment to other sectors. While a large

number of federal and provincial policies exist with these broad objectives they have recently been criticized in a detailed review by Saunders (1984) as deficient in various respects.

First, Canada Employment Centres, maintained by the federal Department of Employment and Immigration, have highly incomplete information about job vacancies across the country and are consequently limited in their ability to match workers facing layoffs with jobs in other sectors. A requirement that employers be required to register all job vacancies with Canada Employment Centres has been proposed as an antidote. In addition, more disaggregated, more regular Labour Force Survey data for specific occupations and more systematic medium-term forecasting of skill shortages would help to match workers facing the prospect of layoffs with institutional retraining programs that are responsive to those shortages.

Second, existing institutional retraining programs have been criticized – they are often of too short a duration to provide significant higher-skills training; too few places for qualified and interested candidates are available; living allowances for trainees are inadequate and student loans are not applicable to such programs; federal-provincial financing arrangements give an exclusive right of participation in them to provincial educational institutions and exclude private-sector training institutions.

Third, geographic-mobility assistance presently covers only part of the direct costs of a move and, for example, does not cover capital losses on the sale of housing units.

Fourth, early-retirement schemes for older workers in declining industries, while presently available in the textile/clothing, footwear, and tanning industries, may warrant consideration in other declining sectors.

Fifth, wage subsidies presently payable to employers who agree to provide on-the-job training to employees, including those previously unemployed, should be varied counter-cyclically to provide adequate participation incentives. As an extension of the wage-subsidy concept, portable wage subsidies should be provided to workers in declining sectors, perhaps conditional on receipt of on-the-job training from employers.

Sixth, while minimum-notice requirements for mass layoffs and mandatory severance payments (so-called 'industrial hostage' policies) may ease the costs of adjustments borne by affected workers, there is little reason to think that these measures reduce the total amounts of productive resources consumed during the course of industrial transitions. Several months prior notice of indefinite layoff may give workers more time to plan their strategies for job search and retraining, although

it seems likely that the continuation of full-time paid employment would preclude any serious efforts at readjustment until the layoff occurs. Advance notice of mass layoffs can also provide unions, government, and interested groups in affected communities with more time to set up adjustment programs and anticipate worker needs.

A number of Canadian jurisdictions have enacted legislation requiring advance notice to employees, unions, and government officials when employers plan to terminate large groups of employees. In Ontario, for example, notice periods of eight weeks are required when fifty to 200 employees are terminated, twelve weeks for 200 to 500 employees, and sixteen weeks if more than 500 employees are indefinitely laid off (MacNeil 1982). No studies have been conducted concerning the impact of these notice requirements on the adjustment experiences of displaced workers. It is equally uncertain whether mandatory severance payments reduce the social costs of shifting displaced workers to new activities. To a large extent, this depends on whether most employees tend to be improvident in setting aside current earnings to finance adjustment contingencies. The efficiency argument against notice and severance-pay regulations views their impact as an implicit tax on firings and thus on hirings. To the extent that the costs of these regulations are actually borne by employers, they discourage new investment and job creation, particularly in cyclical industries, and thus may increase total adjustment costs in some contexts.

Finally, the lack of portability of private pension-plan entitlements, in cases where the employer's contributions have not vested, may be a significant deterrent to job mobility and may justify concerted federal-provincial action to develop uniform and more permissive rules on vesting.

All of these policies are designed to facilitate the redeployment of human capital from declining to expanding sectors by easing the transition costs involved in such shifts. Thus, they have the potential for enhancing both equity and efficiency objectives since they usually entail compensation for following rather than thwarting market signals. In this respect, they stand in contrast to general unemployment-insurance programs or sector-specific, extended unemployment-benefits policies (such as those obtaining under Canada's textile adjustment programs or the US Trade Adjustment Assistance program), which in many cases may retard rather than promote the adjustment process.

Firm-oriented adjustment policies

The distinction between labour- and firm-oriented adjustment policies is not a sharp one at a functional level, in the sense that the latter may be used as an indirect vehicle for cushioning transition costs for labour

However, many firm-oriented adjustment policies carry additional implications.

Various trade-restriction policies have been applied to industries facing a decline in demand for their output: tariffs, import quotas, nontariff barriers to trade. In a purely domestic context, regulatory restrictions on entry and/or price competition in various sectors (e.g., agriculture, airlines, trucking, taxicabs, telecommunications, the professions, brokerage functions, intersectoral competition amongst financial institutions) have similar characteristics. As is conventional wisdom in economics, the economic effects of a trade or regulatory restriction can be replicated in large part by an appropriately designed subsidy such as government procurement policies, capital grants, capital-cost allowances, operating-cost subsidies or tax concessions.

In many cases where such policies are applied, they operate to retard adjustment rather than promote it and, standing alone, are often likely to imply continuing government support if an industry is to be sustainable in its present form. Where international comparative advantage continues to shift against a local industry, or technological change within the domestic economy renders it increasingly obsolete, support for the industry is likely to become increasingly costly both in terms of direct costs and in terms of forgone consumption or production possibilities. The textile, clothing, shoe, tanning, shipbuilding, auto, and east-coast coal-mining industries in Canada, and steel and shipbuilding in the United States, in varying respects, exemplify this phenomenon.

In order to avoid simply perpetuating the status quo in industries such as these, with increasing efficiency losses over time, support policies need to be sensitively structured. On the one hand, they should provide for a tempering of otherwise sudden and substantial transition costs but, on the other, they should ensure that significant adjustment does in fact take place over a time horizon that offers an end prospect of self-sustaining viability on the part of the stronger and more competitive elements in the industry. Even where the need for change is acknowledged, too often it takes the form of financial support to all or most of the firms in the industry to modernize their production processes (e.g., textiles and footwear). Even given this support, foreign producers' access to cheaper raw materials and labour may still render much of the local industry noncompetitive. If *some* firms, through modernization or consolidation, have a reasonable prospect of becoming competitive, one would presumptively expect private capital markets to provide the necessary financing. In contrast, the Japanese government has, in declining sectors such as shipbuilding and steel, paid firms to scrap obsolete or redundant capacity (Reich 1983a). Adjustment policies that

explicitly contemplate the downscaling of an industry over time and the intersectoral and perhaps interregional redeployment of resources including human capital, recognize the necessity of long-term adjustment while moderating the short-run transition costs. In the short run these policies may still be more socially and politically painful than policies that seek to avoid meaningful adjustments; in the long run the alternative is continuing bailouts of failing firms in noncompetitive industries and acquiescence in reduced economic growth for the country at large.

Effective macroeconomic policies

Clearly one of the major factors in the financial difficulties faced by a number of firms that have been the subject of recent bailouts was the dramatic and unanticipated escalation in interest rates on debt outstanding. In part this is a result of major shifts in macroeconomic policy both in Canada and the United States which in turn reflect growing dissatisfaction with the consequences of earlier macroeconomic policies (stagflation). It is a truism to note that marked instabilities in the macroeconomic environment inhibit long-range planning and business confidence in the investment climate, as well as increasing the incidence of firm failures. Moreover, political pressures on governments to intervene in the case of these failures increase to the extent that the public perception is that the failures are a direct consequence of government policy-making.

WHEN SHOULD GOVERNMENT ASSIST RESIDUAL FAILING FIRMS?

Assuming that in some cases, general adjustment processes, even modified as suggested above, do not save a firm from the prospect of bankruptcy, the question then becomes when, if at all, government should intervene to attempt to save the failing firm (abstracting for the moment from the question of the choice of instrument).

A first and obvious point, supported both by Canadian historical experience and by comparative experience from other industrialized democracies, is that if the firm is large enough and implicates enough politically salient interests, bankruptcy is unlikely to prove a politically acceptable option. Some form of intervention is likely to be forthcoming, and the live policy question focuses largely on the choice of instrument of intervention and the particular terms of it. To argue otherwise is to ignore political realities. Moreover, to argue for the institutionalization and more rigorous structuring of the decision-making process for these very large-scale bailouts is to discount two serious classes of difficulties.

First, the large-scale bailouts are so *sui generis* in nature it is difficult to imagine how a program could be designed that could effectively specify criteria, choice of instrument, decision-making processes, budgetary appropriations, etc., so as to take account of all exigencies. Secondly, institutionalizing the bailout process may increase the incidence of business bailouts because of moral-hazard problems created for corporate management, shareholders, creditors, and the bureaucracy in terms of perverse incentives to stimulate the demand for bailouts. Consequent changes to risk-taking attitudes may seriously increase resource misallocations.

However, notwithstanding these difficulties associated with a more institutionalized decision-making process for large-scale bailouts, analytical perspectives need not be entirely extraneous to the process. First, the most obvious class of case involving large-scale bailouts where political imperatives weigh especially heavily is the failure of firms with large workforces who face few alternative opportunities in regionally depressed labour markets. Fortunately, this is precisely the case where economic imperatives also suggest a possible justification for intervention – congestion externalities as a form of market failure. Bailouts, if confined to these situations, involve a close congruence between the strongest political and economic rationales for intervention. Our earlier analysis suggested, however, that of our fourteen case studies, only three or perhaps four cases could possibly fit this profile: Chrysler, Massey Ferguson, the Atlantic fish-processing companies, and perhaps White Farm Implements. Economic and political rationales for bailouts in the other ten cases seem somewhat less compelling. This suggests substantial scope for more discerning interventions.

Secondly, while in the large-scale bailouts involving substantial, concentrated workforces the political forces favouring intervention may be irresistible, economic analysis would still require that the social benefits of intervention be compared to the social costs before a decision to intervene is made. In other words, the social benefits of avoiding congestion externalities and related economic costs, while perhaps indicating a *prima facie* case for intervention, only make out a conclusive case after comparing them with the social costs of intervention. Here, the political and economic perspectives diverge. However, even though political considerations may overwhelm the implications of formal economic analysis in this context, such analysis may still exert a useful disciplining influence on political decision-makers both in terms of revealing the true social costs and benefits of a bailout and in terms of revealing the distribution of costs and benefits of the bailout amongst different interests (i.e., the real winners and losers). This, of course, will

only be so if the results of this kind of analysis (already often performed within the federal bureaucracy) is made public in a timely fashion. This information has never formally been made public either *ex ante* or *ex post* the bailout decision (despite its apparent existence in a number of cases). A serious attenuation of political accountability is the obvious and objectionable result. Strengthened disclosure or freedom-of-information requirements may therefore induce an appropriately higher degree of political circumspection in a number of bailout cases.

Thirdly, where political decision-makers decide in principle to bail out a large-scale, failing firm, even in the face of a negative economic cost-benefit assessment, an analytical perspective is still highly relevant to the choice of strategies to minimize the costs of the bailout. Presumably, politicians, like economists, have little interest in needless dissipation of public resources to achieve their bailout objective. This implies a useful role for a form of cost-effectiveness (in contrast to cost-benefit) analysis. In other words, given a decision to bail out, what is the most efficient (least cost) means of realizing this objective? It must be acknowledged here again that political considerations may often influence the choice of instrument – the visibility and incidence of the costs of a given instruments and trade-offs entailed with other political objectives – but public disclosure of a cost-effectiveness analysis will sharpen public focus on the nature of the choices (Trebilcock et al. 1982).

In the case of medium- to smaller-scale bailout candidates (now typically handled bureaucratically rather than politically, through programs such as the federal Enterprise Development Program and the provincial Ontario Development Corporation), a more comprehensively analytical approach to the bailout decision may be possible. Such an approach would include predetermined criteria, a structured decision-making process distanced somewhat from the political process, and more extensive use of cost-benefit analysis at least to screen outliers on either end of the bailout spectrum. The very existence of a bureaucracy and defined process committed to performing the bailout function again creates opportunistic-behaviour incentives for corporate management, shareholders, creditors, and government officials. The existence of such incentives is especially problematic when, almost by definition, smaller-scale bailout candidates are unlikely to satisfy established economic (market-failure) rationales for intervention. (One possible exception is smaller firms which are major employers in remote communities in which case, again, political perspectives are often likely to dominate). Further, our political system's pluralistic and diffused nature is likely to generate a set of objectives for such an agency that is nebulous and perhaps even contradictory, rendering it difficult to use tightly defined

criteria to finely screen relatively wide-ranging and diverse claims for assistance.

These difficulties notwithstanding, in the case of bureaucratically determined bailouts, it would seem conceptually possible and analytically desirable to isolate the particular form of market failure that is claimed in the case and to examine the costs and benefits associated with particular forms of assistance. Such an examination of costs and benefits should lead to estimates of some broad orders of magnitude, and distribution amongst different interests. Developing some kind of reasonably rigorous market-failure screen is imperative in this context; otherwise government will find itself overwhelmed with potential investments that it is asked to evaluate. This is likely to put more weight on cost-benefit methodology than it can reasonably bear and risks turning government into a lender of first resort in a wide range of situations.

With respect to potentially relevant forms of market failure, arguments about 'gaps' in the Canadian capital market, especially the terms of loan capital and the availability of equity capital, carry little conviction (beyond perhaps very small businesses). Arguments about the failure of the bankruptcy market may have some relevance to cases where productive systems or processes would lose much of their value in a break-up form of liquidation (e.g., Massey, Chrysler), although often even here one would expect to see a sale of the business in bankruptcy as a going concern. In other cases, where physical or human capital is relatively mobile (e.g., Maislin) or where the company's principal assets are natural resources whose value may be largely unaffected by a change of ownership, even on a piecemeal basis (e.g., Dome), the bankruptcy-market-failure argument has limited force. (In Dome's case the concern may have been focused primarily on its major creditor, the Canadian Imperial Bank of Commerce, and alleged threats to the stability of the financial system in the event of a possible major-bank failure – on the facts, not a very compelling argument.) Arguments about labour and related adjustment costs are likely to have more general force, particularly in a recessionary environment, where the social costs, direct and indirect, of large-scale and regionally concentrated layoffs which generate congestion externalities may be substantial. Sometimes, subsidized employment maintenance with a failing firm may be socially less costly than firm failure, and indeed less costly than alternative forms of employment creation or social relief. However, it should be emphasized again that in smaller-scale, bureaucratically determined bailouts, this criterion is rarely likely to be met.

These considerations suggest a role for formal economic analysis, especially in the case of bureaucratically determined bailouts, but also, as noted above, in politically determined bailouts, in identifying relevant and significant forms of market failure and then estimating broad orders of magnitude for the costs and benefits of responding to these failures in various ways. Again, however, public disclosure of this information in a timely fashion is crucial to bureaucratic and political accountability.

THE CHOICE OF BAILOUT INSTRUMENT

Once a decision to intervene has been made in principle by government, difficult decisions must be made as to the form of bailout assistance. The instrument employed may take widely various forms: cash subsidies, loans at subsidized interest rates, loan guarantees, credit insurance, partial equity ownership, outright public ownership, tax relief (expenditures), trade-protection measures, government-procurement policies, or regulatory protection. Within each instrument, modalities may vary widely; for example, various conditions may be attached to direct financial assistance. In addition, assistance may be targeted not on the firms themselves but on the various subinterests that will suffer losses in the event of insolvency. Policies may be directed to providing extended unemployment-insurance benefits to unemployed workers, adjustment assistance (severance payments or subsidized retraining) to workers, prescribed minimum-notice requirements for mass layoffs, or prescribed minimum severance payments in such an event, wage credits or subsidies to induce re-employment of laid-off workers by other employers, new publicly supported investments in alternative business activities in the locality affected by a firm failure, or subsidies to consumers to induce an increase in demand for the output of failing firms (e.g., retail sales tax rebates).

Direct financial assistance

In recent bailouts in Canada, as with the earlier railway bailouts, a strong predilection is evident in policy-making towards the use of loan guarantees (or insurance). This tendency has some disquieting features. Because loan guarantees are an off-budget item in the government's budgetary processes, political and bureaucratic accountability is attenuated. (This may in large part explain their popularity.) Analysis earlier in this study suggested methodologies for estimating the social cost of guarantees, loan insurance, or loans at nonmarket interest rates. As long as the guarantor does not charge the failing firm the market price for the loan guarantee, the social costs can be viewed as the

equivalent of outright grants. Public-accountability considerations suggest that these costs should be calculated in accordance with a declared methodology, be publicly disclosed, and be included at the time of granting in the envelope system for purposes of budgetary oversight (Maslove 1983). Limiting inclusion in expenditure budgets to cases where guarantees are invoked implies that otherwise they are costless; in fact in all cases they involve an expected or opportunity cost. While expected costs and actual costs, if correctly calculated, should result in aggregate in the same figure, accountability for individual decisions is attenuated by deferring reporting until actual costs are incurred.

The preference for loan guarantees may also bias the capital structure of failing companies towards an even more debt-intensive capital structure or provide little incentive to reduce their debt ratio even though the source of their initial difficulties may have been too high a debt load, particularly in periods of high interest rates. Moreover, the existence of a loan guarantee may induce less cautious behaviour on the part of creditors who may not monitor the operations of the firm or who may accept loans in a highly levered firm. Thus, again, moral-hazard problems arise with corporate management, government, and creditors in the administration of a loan-guarantee policy.

In addition to moral-hazard problems, the loan guarantees can result in wealth transfers from the government guarantor to the creditors and/or shareholders of the firm. In other words one must ask *who* is in fact being bailed out and *who* is not being required to pay for past mistakes by virtue of the terms of such guarantees. For example, was the federal government's proposal to bail out Dome really a bailout of its major creditor, the Canadian Imperial Bank of Commerce, and what would the value of the bailout have been to the Bank?

These wealth transfers would not exist if the firm's investors had to pay a guarantee (or insurance) fee that reflected the risk of the guarantee. If the guarantor decides that these wealth transfers are unwarranted, they can be reduced or even eliminated by requiring the firm to issue securities to the guarantor equal in market value to the wealth transfer. These securities would have payoffs contingent on the future success of the company. Moreover, during the period when the firm is restructuring its operations, these securities should not have any cash-flow servicing requirements.

The financial instruments which meet these requirements are warrants (the right to purchase a share of common equity at a predetermined price), bonds or preferred shares which are convertible into common equity, or income bonds. All of these securities have values conditional on the success of the firm and have minimal to nonexistent

servicing charges. These securities have been used in the Chrysler bailout in the United States where the US government made a substantial profit following the dramatic increase in Chrysler's stock price and the subsequent sale of the warrants, and in the Massey Ferguson bailout. However, the creation of 'mixed' enterprises through government equity ownership raises problems of its own in terms of potential divergences between the objective functions of private- and public-sector shareholders and between private- and public-sector accountability regimes.

Another difficulty that crisis assistance to firms creates for governments is containing the level of assistance over time. Having made an initial grant of assistance, refusing further grants of assistance (with a resultant increase in the probability of firm bankruptcy) creates political problems; this may be publicly perceived (perhaps incorrectly) as an acknowledgement by government that the initial grant of assistance was a mistake. This makes government vulnerable to strategic behaviour by corporate management and creditors and may attenuate incentives for firms to restructure in efficient ways (e.g., by downsizing operations), which a one-time-only grant of assistance might have induced. Similar problems arise for government in enforcing the conditions attached to grants of assistance (e.g., employment levels, changes in product mix, downsizing, capital restructuring). Failure by firms to adhere to such conditions confronts governments with politically difficult decisions as to whether to withdraw assistance granted or withhold further assistance; in either case the government risks being publicly perceived as responsible for a firm's subsequent failure. As a result, many conditions in recent bailout arrangements have been frequently violated in Canada, often apparently without consequence. On the other hand, government has terminated assistance in a number of cases, with the consequence of firm failure (e.g., Maislin, CCM, White Farm, Clarke-Irwin, Consolidated Computer, Canadian Commercial Bank). In other cases, the terms of proffered assistance have been sufficiently stringent to force substantial restructuring and downsizing on the part of the failing firms (e.g., Massey Ferguson, Dome Petroleum).

Another difficulty which governments face in fashioning forms of *ad hoc*, crisis assistance to failing firms, is that typically the weakest firms in an industry are those that seek assistance, often at short notice where a rapid government response is imperative if the crisis facing the firm is to be averted. This distorts policy-making in important ways. First, decisions tend to be extremely micro in their focus, and are unlikely to take full account of the broader industry problems of which the failing firm may be merely symptomatic. Second, bailing out the weakest firms

in an industry may do nothing in the long run to induce efficient *industry* restructuring (as opposed to *firm* restructuring) and indeed may be counterproductive in this respect. Comparative experience, especially from France and West Germany, suggests a much greater willingness on the part of government to use the issue of a failing firm in an industry to induce a restructuring of the industry (e.g., by inducing mergers of weaker firms with stronger firms as a condition of grants of assistance). In Japan, cartels that may be formed under the Structurally Depressed Industries Law can be given temporary respite from competitive pressures but are conditioned by subsidies which require agreements to scrap excess capacity and retrain and relocate workers in other forms of employment (Reich 1983a). In Canada, the proposals in Bill C-29, 2 April 1984 (not yet enacted) to amend the Combines Investigation Act that would allow the negotiation of specialization agreements between competitors to rationalize product lines and lengthen production runs, subject to regulatory approval, would tend in the same direction.

Somewhat ironically, these considerations, combined with earlier suggestions for improving background adjustment processes, may argue for less willingness on the part of governments to intervene with failing firms if improved background adjustment mechanisms are in place. However, where intervention is unavoidable, a more *dirigiste* government strategy may be called for so that assistance does not simply perpetuate a state of weakness in an industry that will necessitate indefinite government support. To illustrate, government has provided bailout assistance to three failing farm-machinery companies (Massey Ferguson, White Farm, Co-operative Implements); all had serious excess productive capacity in an industry which generally had the same problem. One result has been claims by some of the assisted companies that they cannot compete with other assisted companies which are 'dumping' products on the market below cost by virtue of the government assistance, and calls for further assistance to the aggrieved firms. Moreover, terms in the bailout arrangements in some cases (e.g., Massey) have required Canadian employment in the firm to be maintained at certain levels. The combined effect of these policies inhibits rather than facilitates the restructuring and downsizing of the industry that could hold out some prospect of long-run economic viability. In this context, the tension between short-run political objectives and long-run economic objectives is clear.

Another example of the same phenomenon is the abortive bailout of Maislin Trucking Ltd. Instead of government supporting the company's continued existence, knowledgeable industry sources claim that, early in the bailout process, the possibility existed of the government inducing a

merger with either of two other major Canadian-owned carriers headquartered in Montreal (perhaps through a cash grant, with conditions, to support an orderly reduction by the merged companies of the excess capacity that may have resulted in the short run). However, with the company's recent receivership, many of its route licences have been bought from the receiver by a US-based carrier. In view of the government's stated objectives in intervening, the outcome seems almost the worst possible in all relevant dimensions. The only recent example in Canada of a more *dirigiste* approach to salvaging failing firms by policies directed at an industry as a whole is the bailout of the Atlantic fish-processing companies through a consolidation of most of the major companies in the industry, although political considerations led to the perpetuation of a number of inefficient local processing plants. Whether this recent initiative will prove successful is too early to judge. However, early indications (e.g., large and growing losses) do not provide a basis for great optimism.

The Canadian bailout experience generally suggests a strong ambivalence between viewing bailouts as an instrument for facilitating an orderly adjustment process and viewing them as an instrument for attempting to defy the forces of adjustment. In the recent round of bailout cases, it might be argued that the difficulties faced by many of the firms in question were of a temporary nature, reflecting the impact of the recession; they were not necessarily cases of failing firms in an industry facing permanent decline. Thus, bridging assistance from government rather than facilitating an orderly contraction of the industry becomes defined as the appropriate policy objective.

There are several difficulties with this argument. First, if the difficulties were clearly temporary, and simply a function of the business cycle, private capital markets should be able to discern this at least as readily as government and provide the necessary bridging finance. Second, in cases where it is genuinely not clear whether an industry's difficulties are temporary or a symptom of long-term decline (e.g., automobiles, farm machinery), it is not obvious that government is better placed than, or indeed as well placed as, private capital markets to make this admittedly difficult judgement. Third, whatever the source of the difficulties faced by an industry – temporary or long-term – a failing firm bears the burden of explanation to government as to why assistance is justified in its particular case when other firms in the industry have been able to cope with the temporary difficulties without government assistance or have embarked upon an effective strategy of adjustment in the case of long-run industry decline. All of this suggests a strong presumption against a bridging without adjustment rationale for bailouts.

Employee buy-outs

An estimated 3,000 companies in the United States have plans in place that encourage employee stock ownership. Some of these companies are extremely large (e.g., AT&T, Mobil). In many of these cases the schemes are essentially deferred-compensation schemes designed to increase motivation and productivity of workers and firm loyalty. With schemes involving minority stock ownership and no real control, many studies express scepticism as to their impact on motivation, productivity, or loyalty (O'Toole 1979). However, where ownership is direct (and not through a trust that restricts voting rights and other forms of participation in the management of the company), where ownership is substantial (most workers are shareholders), and where ownership is broadly held (workers have significant rather than nominal equity), improved profitability and productivity seem to result (O'Toole 1979; Long 1980; Jones and Svejnar 1982). Of the companies that have been involved in employee stock-ownership plans in the United States, a subset has involved employee buy-outs of firms or plants threatened with closure. Wintner estimates that in the last few years sixty companies or plants have been bought by employees to avert shutdown. She claims that only two have failed (involving fifty employees) and that 50,000 jobs have been saved directly and thousands more indirectly (Wintner 1983). Jordan estimates the total number of employee buy-outs of firms or plants in the United States threatened with closure as 'several hundreds' (Jordan 1981). In Europe, especially Spain, Italy, and France, worker co-operatives generally are much more prevalent than in North America; the Basque Mondragon Co-operatives, which employ over 20,000 workers in closely co-ordinated co-operatives, are perhaps the most prominent example (Thomas and Logan 1982). Sweden now apparently has about 100 worker co-operatives, many originating in rescues of failing firms.

Leaving aside producer and marketing co-operatives in the farming and fishing sectors, in Canada worker co-operatives seem to be relatively uncommon, as are other forms of employee ownership. However, in the last few years, there have been several examples of employee buy-outs of firms or plants threatened with closure: Tembec (pulp and paper) and Tricofil (textiles) in Quebec, the Beef Terminal in Toronto, Byers Transport in Alberta, the Vancouver Island Transportation Company in BC, National Hardware Specialities (Ontario), Northern Breweries (Ontario), and Pioneer Chainsaw (Ontario). Tricofil subsequently failed, Byers Transport and Pioneer Chainsaw were sold to investor-owned companies, and Vancouver Island Transportation Company was sold to

the provincial government. The others appear to be operating reasonably successfully under employee ownership (Nightingale and Long 1982; *Globe and Mail* 1983c).

In evaluating the role of employee bailouts in the salvaging of failing firms, several considerations seem to be pertinent. Factors that militate in favour of such an option include the following:

1 It is argued that sometimes corporate management misjudges the potential profitability of firms or branch plants and unjustifiably closes it down. More persuasively, it is argued that corporate management will decide on a close-down where the rate of return of the firm or plant is positive but falls below the target threshold set for the firm's operations as a whole, or alternatively, where the rate of return is normal, but the activities involved do not fit closely with the company's other activities or expansion plans (although in this latter case, one would expect that the operations would be sold to another firm rather than closed down). In this vein, it is argued that successive waves of conglomerate mergers in the United States (in Canada, foreign investment) have led to the growth of extra-community control of economic activities, and an increased insensitivity on the part of corporate management to the social costs to the community of firm or plant closure. In all of these circumstances, it is argued that it may be rational for employees (and perhaps other members of the affected community) to buy out the firm or plant, even if the return realized on the investment is lower than would be acceptable to a private investor, given the benefits to the workers and affected community of avoiding the social costs of shutdown which they are better able to internalize into the buy-out calculus and subsequent terms of compensation (Stern, Wood, and Hammer 1979).

2 It is argued that appropriately structured forms of employee ownership, with meaningful levels of ownership and degrees of participation in decision-making, may increase motivation and productivity. In firms or industries with a history of poor industrial relations, it may be that these relations will be improved by employee ownership, and productivity gains will be realized by fewer work stoppages, etc. (O'Toole 1979; Long 1980; Jones and Svejnar 1982). Along the same lines, it is argued that employees in a company that they own may be more prepared to accept concessions in wages and fringe benefits and to substitute contingent benefits for fixed remuneration. If these concessions had been required by a private-investor-owned company as a condition of continued operations, information asymmetries may make it difficult for workers to determine whether the company is simply 'bluffing' in order to extract concessions or is facing genuine financial difficulties. Union leadership

may also be less hostile to wage and related concessions made in the context of an employee buy-out; they are less likely to be seen as creating the risk of a domino effect throughout a whole industry (D. Olson 1982).

Factors that militate against employee buy-outs of failing firms include the following:

- 1 If the firm is failing because the industry in question is declining as a result of loss in long-run competitiveness, it is unlikely, absent continuing public subsidies, that an employee buy-out will render the enterprise successful. Employee buy-outs in this context have been referred to, pejoratively, as 'lemon socialism'.
- 2 Where the industry in question is capital-rather than labour intensive, raising required amounts of capital, especially if substantial technological modernization is needed, may be beyond the resources of the workers, affected community, and available private sources of capital. Again, public subsidies may be required, but the question must be asked whether these might more effectively be provided to the existing private-investor owners as a form of public bailout. Even here, the claim that such subsidies (and consequential investments) will restore the company to profitability must be confronted with the questions of why private capital markets are not prepared to perform this function.
- 3 Other difficulties arise in the capitalization of employee-owned companies. With respect to the withdrawal of capital by employees, rules should not be so restrictive as to discourage productive forms of mobility or retirement and replacement by younger workers. However, no restrictions on the withdrawal of capital may leave the company exposed to the risk of a run on its capital; in stable firms with a workforce of a given age profile, profits can be set aside on a systematic basis to meet reasonably anticipated retirements or departures. Similar types of problems arise in fashioning the terms of new entry. Young workers should not be foreclosed from productive employment by inability to make substantial initial capital investments, although older workers will obviously feel that they should receive the full current value of their equity in the company and not be required to underwrite inter-generational transfers of wealth. To avoid this they may be tempted to maintain too low a level of reinvestment of profits. These problems can be reduced by schemes that enable new workers to pay for their capital contributions by wage deductions over time or through loans if these can be made available (e.g., from related credit unions or banks).

4 An argument sometimes made against employee stock-ownership plans in general is that they induce workers to 'put all their eggs in one basket' – both jobs and investments – and that this violates prudent strategies of risk diversification. However, in the case of failing firms in dependent communities, this argument may have limited force; the alternatives to a buy-out may expose workers to even higher levels of risks.

5 Apart from access to adequate sources of financing, an employee-owned company requires effective, experienced management, especially in the case of larger and more technologically complex enterprises. On the other hand, participation in decision-making by the workers at large is obviously an important and often positive characteristic of employee-owned firms. Structuring the relationships between the board of directors, executive management, and the workers at large so as to maximize the viability of the enterprise can raise some complex problems of institutional design. These problems are probably reduced in smaller enterprises with modest workforces (e.g., under 1,000 workers) in closely knit communities with strongly shared values (although it is acknowledged that significantly large worker co-operatives have sometimes proved successful in Europe and the United States). These considerations may suggest some of the kind of parameters where employee buy-out of failing firms or plants may be worthy of consideration.

In terms of formal government policy towards employee buy-outs of failing firms, strategies commonly suggested include the following:

- requiring that firms planning to close give a minimum period of notice to their workforce, in part to facilitate relocation but also to give time to consider the organization of a buy-out plan;
- government provision of funding and technical expertise to undertake feasibility studies of possible employee buy-outs;
- the provisions of loan capital by government through the expansion of established industrial-assistance programs to help meet initial capital requirements;
- more generous tax incentives for employee stock-option plans (ESOPs) in general, including buy-outs of failing firms. In the United States, the tax structure permits workers to form an ESOP and borrow a portion of the purchase money for the failing firm from private sources. The company subsequently pays these monies back (deducting both interest and capital contributions within generous limits) and releases stock to

individual workers on the basis of wages, seniority, years of service, etc., as the loan is cleared.

The balance sheet on employee buy-outs of failing firms is a mixed one and suggests a relatively narrow range of circumstances where it would seem a viable strategy. Few of the companies that were the subject of case studies for this volume would seem compelling candidates. Many of the companies are capital intensive (and increasingly so) and given doubts about the companies' financial status, the added factor of uncertainty about the viability of employee-ownership plans would almost certainly have further deterred private sources of capital and thrown a correspondingly greater financial burden of support on the government. However, this is not to deny that there may be smaller, labour- rather than capital-intensive, enterprises earning or capable of earning a modest rate of return where the social costs of closure may render this return the most attractive opportunity available to the workers. In such cases, modest government assistance of the kind described above may be warranted in terms of minimizing social costs (maximizing social welfare), given the absence of less costly alternative forms of employment-maintenance or income-support programs.

Public enterprise

One option open to government in the event that it has decided to attempt to salvage a failing firm or its activities is a government takeover of those activities through the instrument of a crown corporation or other form of public enterprise. Examples amongst our case studies are Canadair, the Atlantic fish-processing companies, Minaki Lodge, and the Whistler Land Development Company. Other prominent examples include the Cape Breton Development Corporation, De Havilland, Quebecair, and the Canadian Saltfish Corporation.

When is it economically or politically rational for government to choose the instrument of public enterprise over various forms of subsidies, grants or loans to private-sector firms? While there are serious problems of incentives and accountability in the case of public enterprise, a number of factors may militate in favour of such a choice (Trebilcock and Prichard 1983). From an economic perspective, these principally revolve around various forms of transactions costs. Policy co-ordination may be most efficiently pursued by internalization of the process within a single public enterprise if the government is attempting to co-ordinate a multiplicity of policy objectives. (Often these objectives cannot be precisely specified because they are, by their nature, unquantifiable or because there are novel or uncertain features in the economic, social, or

political environment surrounding the activities in question which call for constant redefinition of objectives or redefinition of trade-offs among objectives.) In such cases, public ownership may be preferable to a less flexible, more formal, legal-orders regime directed to a multiplicity of private-sector economic agents. This argument derives from theories of the firm that seek to explain the integration of economic activities within firms rather than through reliance on 'contracting out' with owners of the various factors of production.

An additional but related factor is that when government assistance to private-sector firms becomes the dominant source of financing, the private owners' stake in the firm may become so attenuated that it becomes *de facto* a public enterprise under private management where attenuated incentives to efficient management and moral-hazard problems argue for a more structured form of public accountability. Amongst our case studies, the Atlantic fish-processing companies seem to reflect many of these considerations, with complex regional-development objectives at issue. Canadair may also be viewed in a similar light, given the government's commitment to the rather imprecise objective of the preservation and development of a high-technology aerospace industry in Canada with alleged technological, research and development spinoffs for other sectors of the economy. Minaki Lodge and the Whistler Land Development Company do not lend themselves as easily to this transaction cost-related analysis.

However, even where public enterprise can be viewed as an efficient instrument of intervention, the modalities of the instrument are subject to wide variations, and important issues of instrument design within the public-enterprise mode must be addressed. Accountability regimes for federal crown and governmental corporations are presently in a chaotic state. Public concern over the recent performance of Canadair illustrates some of these difficulties. In 1982, the company reported a \$1.4 billion loss. The government has extended loan guarantees of \$1.35 billion to the company and provided a recent cash infusion of \$240 million. Projected further cash infusions in 1984 of over \$300 million, and the government's assumption of all Canadair's outstanding debt indicates the scale of the government's exposure over Canadair's operations. Over \$2 billion appears to have been expended by the government on and following its takeover of Canadair in what is, by several orders of magnitude, the largest (ongoing) bailout in recent Canadian history. By way of comparison, total government subsidies to the Cape Breton coal-mining industry between 1930 and 1982 appear to have totalled just over \$1 billion (in normal terms).

The Public Accounts Committee of the House of Commons has identified a number of shortcomings in the accountability regime to which Canadair was subject (Canada 1983b):

- 1 The role of the responsible Ministers was poorly defined; they were inadequately informed by the board of directors of the company's financial situation and in turn had failed to give clear directives to the company concerning the government's objectives for the company.
- 2 The board of directors, which comprised both private-sector representatives and senior public servants, failed to exercise adequate oversight of management. The private-sector directors apparently deferred excessively to the public-sector directors, viewing them as conduits of the government expectations with regard to the company. The public-sector directors, in turn, were the principal advisors to the responsible Minister in evaluating Canadair's performance, which placed them in a serious position of conflict of interest and substantially compromised their objectivity.
- 3 Canadair, by virtue of not being a scheduled crown corporation under the Financial Administrative Act, was not required, through its responsible Minister, to table annual reports and financial statements in Parliament nor to obtain formal approval of its capital budgets or table them in Parliament. One consequence of this lack of accountability was the extensive use of 'letters of comfort' (informal loan guarantees) for more than \$1 billion over a six-year period, without public disclosure thereof and without the budgetary controls (e.g., the envelope system) or parliamentary scrutiny associated with direct expenditures. While the lack of public accountability may have been an attractive political feature of this practice, it biased the capital structure of the company towards a very high debt-to-equity ratio in a high-risk enterprise in a period of very high interest rates which cash grants or equity infusions would have ameliorated (although with concomitantly greater parliamentary scrutiny).
- 4 The private auditors of the company, while complying with generally accepted private-sector accounting principles, had failed to alert Parliament of the company's deteriorating financial position and the causes thereof, a responsibility which the Auditor-General bears for government departments, agencies, and some scheduled crown corporations.

These conclusions all seem well taken. Following the transfer of the government's shares in Canadair to the Canada Development Investment Corporation (a government holding company), a major restruc-

turing of Canadair has been undertaken entailing assumption of its debt obligations by the government, cost reductions, revamped management, reduced output, and more detailed and more public financial-reporting procedures. Operating losses in 1983 were sharply reduced and further improvements in financial performance are projected for 1984. The recently elected Conservative government has announced that the Canada Development Investment Corporation has been instructed to attempted to fund a private buyer for Canadair. More generally, in March 1984, the previous government introduced extensive amendments to the Financial Administration Act to provide more comprehensive coverage of crown corporations by the Act and to impose more stringent accountability requirements (subsequently enacted with further amendments).

While designing comprehensive accountability regimes for all government owned or controlled companies is an intractable task, given the widely varying functions and objectives that are assigned to them, the Canadair experience highlights the need to address these issues of control and accountability carefully and explicitly in the design of a public-enterprise takeover of a failing firm if a failing private-sector firm is not simply to be replaced by a more socially costly failing public-sector firm.

CONCLUSION

The recent bailout experience in Canada, if evaluated against straightforward business criteria of success, gives few grounds for satisfaction. Of the fourteen companies that were the subject of case studies in this volume, only two – Chrysler Canada (where the government loans and loan guarantees were never utilized) and Electrohome – have achieved at the time of writing self-sustaining economic viability. Even in these two cases the long-run prospects for the two companies are not entirely free from doubt. Electrohome is again reporting large operating losses and the future of the North American automobile industry is a matter of debate. Five of the other attempted bailouts resulted in receiverships. In none of the remaining cases are the companies presently profitable. In some of these cases it is premature to attempt a judgement on long-run prospects for viability; in most cases other than the two apparent success stories, the prospects seem dim. Of course, self-sustaining economic viability is not the only objective against which to measure the success of these bailouts. For example, moderating the social impacts of economic transactions, regional development goals, and Canadian economic nationalism entail objectives that may be realized even if long-run economic viability cannot be attained. However, in the absence of the

latter, these goals can only be realized at a substantial price, the full magnitude of which cannot easily be determined because recurrent and perpetual demands for assistance seem often implied by these goals. Whether the goals in every case are worth the ultimate price is the true measure of the success or failure of bailouts. A conscious, informed and rigorous public focus on these trade-offs is a precondition to improvements in the policy environment in which these decisions are taken.

Failing firms and concomitant claims on government for assistance have been a prominent feature of Canadian economic history. Recent bailout experience, while presenting its own particular complexions, is not a new phenomenon. If the past is any guide to the future, bailouts will remain a difficult problem for Canadian policy makers. Indeed, with increasingly rapid rates of technological change and shifts in comparative advantage in a more competitive and demanding international economic environment, the problem may well prove more acute in the future as we attempt to grapple with the social, economic, and political implications of our processes of economic adjustment, of which the bailout phenomenon must be viewed as an integral part.

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34 The Political Economy of Business Bailouts

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The *Political Economy of Business Bailouts* is an interdisciplinary study that draws on legal, economic, and political perspectives in seeking to explain the patterns of business bailouts by governments in Canada, in attempting to evaluate their costs and benefits, and in proposing alternative policy approaches to what has become a major policy dilemma for government. The study offers an historical sketch of the nature of the bailout phenomenon in Canada since the early years of the nineteenth century and then proceeds to evaluate possible economic justifications for government bailouts of failing firms. Few economic justifications are found persuasive. Political explanations of business bailouts provide a possible basis for government intervention in a much wider range of cases. The economic and political frameworks of analysis are then brought to bear on fourteen case-studies of recent business bailouts. Few can be justified in economic terms, although many more seem explicable in terms of the political framework of analysis. The study then proceeds to examine comparative bailout experience in a number of other countries, and concludes, by drawing on both Canadian and comparative experience, in offering a variety of proposals designed to render more congruent than in the past the policy outcomes suggested by sound economic analysis and those dictated mostly by political considerations.

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